PUBLIC UTILITIES COMMISSION

HECO Rate Case (TY 2009)
Docket No. 2008-0083

FILED
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PUBLIC UTILITIES COMMISSION

HECO's MOTION FOR SECOND INTERIM INCREASE FOR CIP CT-1 REVENUE REQUIREMENTS, OR IN THE ALTERNATIVE, TO CONTINUE ACCRUING AFUDC FOR THE CIP CT-1 PROJECT

November 19, 2009

Goodsill Anderson Quinn & Stifel

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PUBLIC UTILITIES COMMISSION

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAII

In the Matter of the Application of **HAWAIIAN ELECTRIC COMPANY, INC.** **For Approval of Rate Increases and Revised Rate Schedules and Rules**	**DOCKET NO. 2008-0083**

HAWAIIAN ELECTRIC COMPANY, INC.'S MOTION FOR SECOND INTERIM INCREASE FOR CIP CT-1 REVENUE REQUIREMENTS, OR IN THE ALTERNATIVE, TO CONTINUE ACCRUING AFUDC FOR THE CIP CT-1 PROJECT

EXHIBITS 1 AND 2

STATEMENT OF FACTS

DECLARATIONS OF ROBERT C. ISLER, CECILY A. BARNES AND ROSS H. SAKUDA

MEMORANDUM OF LAW IN SUPPORT OF MOTION

AND

CERTIFICATE OF SERVICE

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BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAII

In the Matter of the Application of	
HAWAIIAN ELECTRIC COMPANY, INC.	**DOCKET NO. 2008-0083**
For Approval of Rate Increases and Revised Rate Schedules and Rules	

HAWAIIAN ELECTRIC COMPANY, INC.'S MOTION FOR SECOND INTERIM INCREASE FOR CIP CT-1 REVENUE REQUIREMENTS, OR IN THE ALTERNATIVE, TO CONTINUE ACCRUING AFUDC FOR THE CIP CT-1 PROJECT

HAWAIIAN ELECTRIC COMPANY, INC. ("Hawaiian Electric" or "Company") respectfully requests that the Commission issue a second interim decision and order as soon as possible authorizing an additional interim increase in the amount of $12,671,000.[1] The requested interim increase represents the revenue requirements for the Campbell Industrial Park ("CIP")

[1] See Exhibit 1, page 1 to this Motion, which compares the Results of Operations provided in Hawaiian Electric's July 8, 2009 Revised Schedules (that were submitted in response to the Interim Decision and Order filed July 2, 2009) to the Results of Operations that add back in the CIP CT-1 costs that were removed in response to the July 2, 2009 Interim Decision and Order (with the exception of the Fuel Inventory costs, as is discussed further in the attached Statement of Facts). The additional interim increase amount of $12,671,000 includes the revenue requirements for the CIP CT-1 water treatment system costs (of approximately $6.5 million). The CIP CT-1 water treatment system is expected to be in service by December 15, 2009. See the attached Statement of Facts, and Declaration of Robert Isler. In addition, it should be noted that the accrued costs for the CIP CT-1 components that have been closed to plant in service exceed the estimated CIP CT-1 project costs included in the Settlement Agreement and thus, the amount proposed to be included in the 2009 test year estimates.

If the revenue requirements relating to the CIP CT-1 water treatment system costs are excluded for purposes of determining the requested second interim increase, the amount of the additional interim increase would be reduced to $12,229,000. See Exhibit 1, page 1 to this Motion, which compares the Results of Operations provided in Hawaiian Electric's July 8, 2009 Revised Schedules to the Results of Operations that add back in the CIP CT-1 costs that were removed in response to the July 2, 2009 Interim Decision and Order (with the exception of the Fuel Inventory costs and water treatment system costs).

Exhibit 2 to this Motion provides the Results of Operations provided in Hawaiian Electric's July 8, 2009 Revised Schedules, which were submitted in response to the Interim Decision and Order filed July 2, 2009.

Combustion Turbine Unit 1 ("CT-1") Project that were included in the Settlement Agreement between Hawaiian Electric, the Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs, and the Department of Defense filed May 15, 2009 ("Settlement Agreement"), but were not included in the first interim increase of $61,098,000 authorized by the Interim Decision and Order filed July 2, 2009, and Order Approving HECO's Revised Schedules filed August 3, 2009.[2] Exhibit 1 to this motion provides the results of operations for revenues at current effective rates with the first interim increase.

If, in the alternative, the Commission determines that the capital costs for CIP CT-1 should not be included in rate base at this time as either "used or useful" Plant in Service, or as Property Held for Future Use, then Hawaii Electric respectfully requests that the Commission issue an order allowing the Company to accrue an Allowance for Funds Used During Construction ("AFUDC") on the components of the CIP CT-1 Project that have been transferred to Plant in Service.

First Interim Decision and Order

In its Interim Decision and Order issued July 2, 2009 ("Interim D&O"), the Commission excluded the revenue requirements arising out of the capital and operations and maintenance ("O&M") costs for CIP CT-1 from the interim rate increase, stating that:

> The commission is concerned that HECO's CT-1 unit is not currently "used and useful." To allow HECO to recover costs associated with CT-1 as of July 2009, prior to it becoming "used and useful" is inappropriate and inconsistent with Decision and Order No. 23457, filed on May 23, 2007. In addition, the commission is concerned that CT-1 may not be operational by the end of the 2009 test year because the fuel supply contract has not been resolved. The record is currently insufficient to demonstrate that the CT-1 unit will be in service by the end of the 2009 test year.

[2] In the present Motion, Hawaiian Electric is not requesting that any biofuel inventory for CIP CT-1 be included in the 2009 test year fuel inventory. See Part I of the Statement of Facts.

By Decision and Order issued August 5, 2009 ("Imperium D&O"), in Docket No. 2007-0346, the Commission rejected the Imperium biofuels contract, as amended. The Commission noted, "in general, that the terms of the Amended Contract are substantially less favorable to HECO (and therefore its ratepayers) in price, risk, scope, and additional costs than the Original Contract due to the new point of delivery of fuel."

Reading these decisions together, it clearly appears that the Commission would not support the inclusion of the CIP CT-1 capital costs in rate base unless (1) the generating unit is actually installed and running, and (2) there is an evidence of a secured biodiesel supply.

Although CIP CT-1 has been placed in service and is fully capable of serving customer load, Hawaiian Electric is still in the process of obtaining biodiesel supplies for the unit.[3] Until proper approvals and permits are received to operate CIP CT-1 on biofuels and biofuels are available, the unit will not be operated to serve customer load except pursuant to the Commission's orders or instructions.

There has been a gap between the time that (1) the CIP CT-1 generating unit was placed in service, and the performance guarantee testing under the Siemens contract was subsequently completed, and (2) biodiesel will be available for the conduct of the emissions testing. There will be another gap in time, which has always been anticipated, between the completion of the biodiesel emissions tests and the modification of the air permit for CIP CT-1 to permit the burning of biodiesel on an on-going basis. Depending on the time required for approval of a new contract for the operational supply of biodiesel, and initial deliveries of biodiesel under the new contract, there could be a further gap in time between the modification of the air permit and

[3] The status of Hawaiian Electric's efforts to obtain the necessary test and operational supplies of biodiesel for CIP CT-1 is discussed in Part III of the Statement of Facts. The use of CIP CT-1 pending the emissions testing using biodiesel, the air permit modification, and the acquisition of an operational supply of biodiesel are discussed in Part III of the Statement of Facts.

the availability of biodiesel for full time operation of the unit.

Hawaiian Electric's initial efforts to secure an operational supply of biofuel were unsatisfactory to the Commission, as it clearly indicated in rejecting the amended Imperium Contract.

Hawaiian Electric also understands the Commission's concern, in the wake of the rejection of the Imperium contract, that the Company was not in a position to comply with a key element of the approval of CT-1 – a viable supply of biofuels.

The Company accepts full responsibility for the inadequacies in the amended Imperium contract filing that it made with the Commission. The Company further acknowledges that, given the lack of a viable biofuels contract, the Commission's action in denying the Company interim relief on CT-1 in its July 2, 2009 decision was reasonable. The Company also acknowledges that conditioning any recovery of CIP CT-1 cost on an adequate showing of the Company's commitment to biofueling is very appropriate under the circumstances.

Hawaiian Electric cannot redo the Imperium contract or amendment now. But it has endeavored to address the need for a new RFP process and to acquire the emissions test fuel as rapidly as possible.

Hawaiian Electric's efforts since then to order the test supply of biodiesel and to expeditiously carry out the RFP for an operational supply of biodiesel demonstrate that supplies of biofuels will be available and that the Company is making the appropriate commitments to obtain them. The Company took to heart the lessons learned in the Imperium case and the current biofuels arrangements can be regarded as real and as viable. Furthermore, by taking the risk of purchasing the initial supply without Commission approval, the Company is fully demonstrating its commitment to meeting the conditions of the order authorizing CT-1. Stated

otherwise, to the extent that the Commission was saying that a "used and useful CT-1" needed to be a "used and useful biofueled CT-1," the Company is making clear its compliance with the full condition that went with the approval of CT-1.

Three Options

The CIP CT-1 generating unit project is intended to provide three significant attributes: (1) to address the reserve margin shortfall situation; (2) to provide blackstart capability in the event of an island-wide blackout; and (3) to provide biofueled peaking generation.

With respect to the first attribute, CIP CT-1 is connected to the grid and available to serve customers in circumstances permitted by the Commission.[4] (I.e., the generating unit is actually installed and operational, although it has been run only for testing and emergency use.) With respect to the second attribute, the blackstart units are in service. With respect to biodiesel, the Company has moved aggressively to rebid the contracts, to file the test fuel contract, to take the risk of purchasing the first contract amount without prior approval (which potentially means that it would not be able to recover that amount if the test fuel contract is not approved), and to show the Commission the clear path the Company has to the second operational fuel contract.[5]

Given these developments, there are three options for the Commission to allow the Company to earn a return on its investment in CIP CT-1 at this time:

(1) Option one – approve a second interim increase now on the basis that the unit is properly included in plant in service, and is used and useful given the first two attributes. The amount of the second interim would be $12.7 million, which includes the rate base related revenue requirements of about $11 million, and expense related revenue requirements of about

[4] In its Imperium D&O, the Commission noted that its order approving the stipulation requires HECO to operate CT-1 using only 100% biofuel, and "reminds HECO that it cannot operate CT-1 using a fuel other than 100% biofuels, absent prior approval of the commission." Id. at 5 n.5, citing Decision and Order No. 23457 at 2.

[5] See further discussion in the attached Statement of Facts.

$2 million.

(2) Option two – approve a second interim increase now on the basis that the unit is still property held for future use, because an operational supply of biodiesel has not yet been obtained. (Under this option, the CT-1 capital cost would be in rate base as property held for future use, but depreciation should not start until 2011 – after the operational supply of biodiesel is approved and obtained).

(3) Option three – allow the Company to reclassify the costs of the project included in plant in service to construction work in progress ("CWIP") and to accrue AFUDC until an operational supply of biodiesel is obtained, and to allow a second interim later when the operational supply of diesel is obtained.

Option one is the preferred option, and is consistent with case law holding that (1) property that services current needs, or both current and future needs, should be included in rate base as utility plant in service;[6] and (2) generation held for reserve, standby or emergency capacity has been deemed to be used and useful for utility purposes.[7] Option two reaches the same result,[8] but requires securing of an operational supply of biodiesel for the unit before it can be included in plant in service. Option three presents complications, but would compensate the Company for the carrying cost of the investment.

The amount of the second interim increase under Option 1 or Option 2 would be the same, and would be equal to the proposed interim revenue requirements for CIP CT-1 included in the settlement agreement (with the exception that Hawaiian Electric is not requesting that any biofuel inventory for CIP CT-1 be included in the 2009 test year fuel

[6] See Part II of the attached Memorandum of Law.

[7] See Part III of the attached Memorandum of Law. Accordingly, if CIP CT-1 is not included as plant in service, then CIP CT-1 should be included as property held for future use, as discussed in Part IV of the attached Memorandum of Law.

[8] See Part V of the attached Memorandum of Law.

inventory).[9]

As discussed in Part I of the attached Statement of Facts, the settlement is based on the average rate base concept, and does not provide for the full recovery of CIP CT-1 costs. The contemplated mechanism for recovering the remainder of the costs is through the Revenue Adjustment Mechanism ("RAM") included in the Joint Decoupling Proposal submitted by the Hawaiian Electric Companies and the Consumer Advocate in Docket No. 2008-0274. If the proposed RAM (or a similar mechanism) is not approved for implementation in 2010, then Hawaiian Electric plans to submit another motion requesting recovery of such costs in this docket.

In Option 2, the costs of the CIP CT-1 project would be included in Property Held for Future Use until the operational supply of biodiesel is approved and obtained, at which time the costs would be placed in plant in service. Since that is not expected to occur until 2010, depreciation of the depreciable costs for the project would not be expected to begin until 2011. (Including the capital costs for the project in Property Held for Future Use should not affect the amount of the interim increase, however, since the interim increase should still include the costs of staffing and maintaining the unit to have it available for use in an emergency.)

In Option 3, the accrual of AFUDC would be discontinued when an operational supply of biodiesel is obtained and the project costs are transferred again into plant in service. At that time, Hawaiian Electric would have to file a motion to include the "full" CIP CT-1 costs in interim rates to avoid a gap in earning a return on the costs. The full costs would be limited in this proceeding to the test year estimate, despite the accrual of

[9] See Part I of the attached Statement of Facts.

additional AFUDC.

Interim Nature of Order

The order allowing a second interim increase would still be an interim order, and the amounts collected under the interim would be subject to refund if not allowed in the final order. The Commission will be able to track the Company's progress in obtaining biofuel in the biofuel contract proceeding, or through reports it requires in its order. If the Commission is not satisfied with the biofuel progress when the final order is issued, the Commission could take further action, including removing the CT-1 costs from rate base.

Hawaiian Electric would have no objection, for example, if the Commission specifically stated in the second interim order that, while the Company is receiving approval to place the unit in its rate base, the Company is to report on its biofueling effort and if the Commission is not satisfied with the Company's progress, the Commission reserves the right to impose an appropriate penalty, including the right to order to that the unit be removed from rate base.

HRS § 269-16(d) explicitly provides that the interim is subject to refund with interest. As a result, HECO's customers are protected in the event the interim is higher than the final award. The Company is not equally protected if the interim turns out to be lower than the final award. There is no retroactive increase available to the Company under that circumstance.

Interim Rate Design

With respect to rate design, the Parties have agreed in the Stipulated Settlement Letter to allocate any interim or final increase in electric revenues to rate classes in the percentages shown in the section on Cost of Service/Rate Increase Allocation/Rate Design in Exhibit 1 of the Stipulated Settlement Letter. According to the Stipulated Settlement

Letter, this considers the positions of Hawaiian Electric, the Consumer Advocate and the Department of Defense on cost of service and movement of inter-class revenues towards the respective cost of service positions. In addition, the Parties agreed to allocate the interim increase in electric revenues assigned to Schedule PP customers such that the Schedule PP customers who are Directly Served from a substation are assigned a revenue increase that is 50% of the overall revenue percentage increase that the interim increase represents. The Parties also agreed to implement the interim rate increase on a cents per kWh basis. This was adopted by the Commission in the Interim D&O, and should be the basis for applying the second interim increase as well.

Basis for Request

This Motion is made pursuant to Section 6-61-41 of the Rules of Practice and Procedure before the Public Utilities Commission, and is based on Section 269-16(d) of the Hawaii Revised Statutes,[10] the Commission's inherent authority to issue interim orders and to specify the Company's accounting practices, the Statement of Facts and related Declarations of Robert C. Isler, Cecily A. Barnes and Ross H. Sakuda attached hereto, the Memorandum of Law attached hereto, the Settlement Agreement, the evidence and arguments presented during the evidentiary hearings, and the entire record herein. Based on the foregoing, Hawaiian Electric respectfully submits that it has demonstrated probable entitlement to a second interim increase in the amount of $12,671,000.

Hawaiian Electric appreciates the opportunity to have presented its Closing Argument at the conclusion of the evidentiary hearings on November 4, 2009, and presented its oral argument in support of a second interim increase at that time. Therefore, the Company does not request a

[10] There is substantial precedent in Hawaii for the issuance of a second interim rate increase. See Part V of the attached Memorandum of Law.

hearing on the motion, unless the Commission has factual or legal questions that would be addressed at such a hearing.

DATED: Honolulu, Hawaii, November 19, 2009.

THOMAS W. WILLIAMS, JR.
PETER Y. KIKUTA

Attorneys for
HAWAIIAN ELECTRIC COMPANY, INC.

EXHIBIT 1

Docket No. 2008-0083

Hawaiian Electric 2009 Test Year Rate Case

SECOND INTERIM INCREASE FOR CIP CT-1

	Revenue Increase	
SECOND INTERIM INCREASE FOR CIP CT-1		
With CIP CT-1	$ 73,769,000	Exhibit 1, page 2
Without CIP CT-1	$ 61,098,000	Exhibit 2 *
Second Interim Increase	$ 12,671,000	

SECOND INTERIM INCREASE FOR CIP CT-1 BUT WITHOUT WATER TREATMENT		
With CIP CT-1 but without Water Treatment	$ 73,327,000	Exhibit 1, page 15
Without CIP CT-1	$ 61,098,000	Exhibit 2 *
Second Interim Increase without Water Treatment	$ 12,229,000	

INCREMENTAL REVENUE REQUIREMENT FOR WATER TREATMENT		
With CIP CT-1	$ 73,769,000	Exhibit 1, page 2
With CIP CT-1 but without Water Treatment	$ 73,327,000	Exhibit 1, page 15
Water Treatment Revenue Requirement	$ 442,000	

* This revenue requirement run is identical to Exhibit 1 of Hawaiian Electric's July 8, 2009 *Revised Schedules Resulting from Interim Decision and Order* which the Commission approved as the interim increase amount in its August 3, 2009 *Order Approving HECO's Revised Schedules* in Docket No. 2008-0083.

Hawaiian Electric Company, Inc.
Interim w/CT1 at avg cost
Results of Operations
2009
($ Thousands)

	Current Effective Rates	Additional Amount	Revenue Requirements to Produce 8.45% Return on Average Rate Base
Electric Sales Revenue	1,292,685	73,718	1,366,403
Other Operating Revenue	4,140	51	4,191
Gain on Sale of Land	615		615
TOTAL OPERATING REVENUES	1,297,440	73,769	1,371,209
Fuel	438,348		438,348
Purchased Power	346,467		346,467
Production	77,691		77,691
Transmission	13,633		13,633
Distribution	29,420		29,420
Customer Accounts	12,358		12,358
Allowance for Uncoll. Accounts	1,302	0	1,302
Customer Service	5,514		5,514
Administration & General	87,286		87,286
Operation and Maintenance	1,012,019	0	1,012,019
Depreciation & Amortization	81,868		81,868
Amortization of State ITC	(1,453)		(1,453)
Taxes Other Than Income	121,945	6,553	128,498
Interest on Customer Deposits	479		479
Income Taxes	17,942	26,154	44,096
TOTAL OPERATING EXPENSES	1,232,800	32,707	1,265,507
OPERATING INCOME	64,640	41,062	105,702
AVERAGE RATE BASE	1,251,571	(664)	1,250,907
RATE OF RETURN ON AVERAGE RATE BASE	5.16%		8.45%

Hawaiian Electric Company, Inc.

Interim w/CT1 at avg cost
COMPOSITE EMBEDDED COST OF CAPITAL
Estimated 2009 Average

	A	B	C	D
	Capitalization			
	Amount in Thousands	Percent of Total	Earnings Reqmts	Weighted Earnings Reqmts (B) x (C)
Short-Term Debt	0	0	0.75%	0.000%
Long-Term Debt	576,569	40.76	5.81%	2.368%
Hybrid Securities	27,775	1.96	7.41%	0.146%
Preferred Stock	20,696	1.46	5.48%	0.080%
Common Equity	789,374	55.81	10.50%	5.860%
Total	1,414,414	100.00		
Estimated Composite Cost of Capital				8.454%
			or	8.45%

Hawaiian Electric Company, Inc.

Interim w/CT1 at avg cost
2009 AVERAGE RATE BASE
($ Thousands)

	Beginning Balance	End of Year Balance	Average Balance
Investments in Assets Serving Customers			
Net Cost of Plant in Service	1,365,578	1,575,485	1,470,532
Property Held for Future Use	2,331	2,331	2,331
Fuel Inventory	43,274	43,274	43,274
Materials & Supplies Inventories	16,391	15,972	16,182
Unamort. Net SFAS 109 Reg. Asset	57,753	62,718	60,236
Unamort Sys Dev Costs	4,684	7,936	6,310
RO Pipeline Reg Asset	0	6,366	3,183
ARO Reg Asset	10	12	11
Total Investments in Assets	1,490,021	1,714,094	1,602,059
Funds From Non-Investors			
Unamortized CIAC	178,757	183,375	181,066
Customer Advances	947	807	877
Customer Deposits	8,201	8,581	8,391
Accumulated Def. Income Taxes	132,510	156,551	144,531
Unamort State ITC (Gross)	30,102	28,650	29,376
Unamortized Gain on Sale	1,345	746	1,046
Pension Reg Liability	3,051	-3,454	-202
OPEB Reg Liability	777	433	605
Total Deductions	355,690	375,689	365,690
Difference			1,236,369
Working Cash at Current Effective Rates			15,202
Rate Base at Current Effective Rates			1,251,571
Change in Rate Base - Working Cash			(664)
Rate Base at Proposed Rates			1,250,907

Hawaiian Electric Company, Inc.

Interim w/CT1 at avg cost
WORKING CASH ITEMS
2009
($ Thousands)

	A COLLECTION LAG (DAYS)	B PAYMENT LAG (DAYS)	C NET COLLECTION LAG (DAYS) (A - B)	D ANNUAL AMOUNT
ITEMS REQUIRING WORKING CASH				
Fuel Oil Purchases	37	17	20	431,206
O&M Labor	37	11	26	96,094
O&M Nonlabor	37	33	4	121,616
ITEMS THAT PROVIDE WORKING CASH				
Revenue Taxes	37	66	(29)	115,004
Income Taxes-Curr Eff Rates	37	39	(2)	(6,099)
Income Taxes-Proposed Rates	37	39	(2)	20,055
Purchased Power	37	37	0	346,467

	E AVERAGE DAILY AMOUNT (D/365)	F WORKING CASH (CURR EFF RATES) (C X E)	G AVERAGE DAILY AMOUNT (PROPOSED)	H WORKING CASH (PROPOSED RATES) (C X G)
ITEMS REQUIRING WORKING CASH				
Fuel Oil Purchases	1,181	23,628	1,181	23,628
O&M Labor	263	6,845	263	6,845
O&M Nonlabor	333	1,333	333	1,333
ITEMS THAT PROVIDE WORKING CASH				
Purchased Power	949	0	949	0
Revenue Taxes	315	(9,137)	333	(9,658)
Income Taxes-Curr Eff Rates	(17)	33		
Income Taxes-Proposed Rates	55	-	55	(110)
Settlement Adjustment		(7,500)		(7,500)
Total		15,202		14,538
Change in Working Cash				(664)

Hawaiian Electric Company, Inc.

Interim w/CT1 at avg cost
COMPUTATION OF INCOME TAX EXPENSE
2009
($ Thousands)

	Current Effective Rates	Adjustment	At Proposed Rates
Operating Revenues	1,297,440	73,769	1,371,209
Operating Expenses:			
Fuel Oil and Purchased Power	784,815		784,815
Other Operation & Maintenance Expense	227,204	0	227,204
Depreciation	81,868		81,868
Amortization of State ITC	(1,453)		(1,453)
Taxes Other than Income	121,945	6,553	128,498
Interest on Customer Deposits	479		479
Total Operating Expenses	1,214,858	6,553	1,221,411
Operating Income Before Income Taxes	82,582	67,216	149,798
Tax Adjustments:			
Interest Expense	(31,448)		(31,448)
Meals and Entertainment	78		78
	(31,370)	0	(31,370)
Taxable Income at Ordinary Rates	51,212	67,216	118,428
Income Tax Exp at Ordinary Rates	19,926	26,154	46,080
Tax Benefit of Domestic Production Activities Deduction	1,746		1,746
Tax Effect of Deductible Preferred Stock Dividends	23		23
R&D Credit	215		215
TOTAL INCOME TAX EXPENSE	17,942	26,154	44,096

Hawaiian Electric Company, Inc.

Interim w/CT1 at avg cost
COMPUTATION OF TAXES OTHER THAN INCOME TAX
2009
($ Thousands)

	Rate	Current Effective Rates	Adjustment	At Proposed Rates
Electric Sales Revenue		1,292,685	73,718	1,366,403
Other Operating Revenue		4,140	51	4,191
Operating Revenues		1,296,825	73,769	1,370,594
Public Service Tax	5.885%	76,242	4,341	80,583
PUC Fees	0.500%	6,478	369	6,847
Franchise Tax	2.500%	32,285	1,843	34,128
Payroll Tax		6,940		6,940
TOTAL TAXES OTHER THAN INCOME TAX		121,945	6,553	128,498

Hawaiian Electric Company, Inc.

Interim w/CT1 at avg cost
CALCULATIONS OF REVENUE REQUIREMENTS
2009
($ Thousands)

OPERATING INCOME AT CURRENT EFFECTIVE RATES:		
Operating Revenues		1,297,440
Fuel and Purchased Power Expenses		784,815
Other O&M Expenses		227,204
Depreciation & Amortization Expense		81,868
Amortization of State ITC		(1,453)
Taxes Other than Income		121,945
Interest on Customer Deposits		479
Income Taxes		17,942
Total Operating Expenses		1,232,800
OPERATING INCOME AT CURRENT EFFECTIVE RATES		64,640
CALCULATIONS OF REVENUE REQUIREMENTS:		
OPERATING INCOME		
Rate Base at Proposed Rates		1,250,907
Proposed Rate of Return on Rate Base	x	8.45%
Operating Income		105,702
Less: Operating Income at Current Effective Rate		64,640
INCREASE IN OPERATING INCOME		41,062
OPERATING REVENUES:		
Increase in Operating Income		41,062
Operating Income Divisor (divided by)		0.55663
INCREASE IN OPERATING REVENUES		73,769
Increase in Electric Sales Revenue		73,718
Other Operating Revenue Rate	x	0.069%
Increase in Other Operating Revenues		51
		73,769

Hawaiian Electric Company, Inc.

Interim w/CT1 at avg cost
CALCULATIONS OF REVENUE REQUIREMENTS
2009
($ Thousands)

BAD DEBT:		
Increase in Electric Revenues		73,718
Bad Debt Rate	x	0.0000
INCREASE IN BAD DEBT EXPENSE		0
REVENUE TAX:		
Increase in Operating Revenues		73,769
Less: Increase in Bad Debt Expense		0
		73,769
PSC Tax & PUC Fees Rate	x	6.385%
		4,710
Increase in Electric Revenues		73,718
Less: Increase in Bad Debt Expense		0
		73,718
Franchise Tax Rate	x	2.500%
		1,843
INCREASE IN REVENUE TAX		6,553
INCOME TAX:		
Increase in Operating Revenues		73,769
Effective Income Tax Rate after considering revenue tax & bad debt	x	35.453%
INCREASE IN INCOME TAX		26,154
INCREASE IN OPERATING INCOME (check)		41,062

Hawaiian Electric Company, Inc.

Interim w/CT1 at avg cost
CALCULATIONS OF REVENUE REQUIREMENTS
2009
($ Thousands)

CHANGE IN RATE BASE:

	A EXPENSE AMOUNT	B AVERAGE DAILY AMOUNT (A/365)	C NET COLLECTION LAG (DAYS)	D WORKING CASH REQMT (B)x(C)
Increase in Revenue Tax	6,553	18	(29)	(521)
Income Tax at curr eff rate	(6,099)	(17)	(2)	(33)
Income Tax at proposed rate	20,055	55	(2)	(110)
CHANGE IN RATE BASE - WORKING CASH				(664)
Rate Base at Current Effective Rates				1,251,571
PROPOSED RATE BASE				1,250,907
Operating Income at Current Effective Rates				64,640
Increase in Operating Income				41,062
OPERATING INCOME AT PROPOSED RATES				105,702
PROPOSED RATE OF RETURN ON RATE BASE (check)				8.45%

Hawaiian Electric Company, Inc.

Interim w/CT1 at avg cost
SUPPORT WORKSHEET
2009

OPERATING REVENUES:	
Electric Sales Revenues	1,292,685
Other Operating Revenues	4,140
Gain on Sale of Land	615
TOTAL OPERATING REVENUES	1,297,440
FUEL OIL AND PURCHASE POWER EXPENSES:	
Fuel Oil Expense	431,206
Fuel Related Non-labor Exp	6,549
Fuel Handling Labor Expense	593
Fuel Oil Expense	438,348
Purchased Power Expense	346,467
TOTAL FUEL OIL AND PURCHASE POWER EXPENSES	784,815
OTHER OPERATION & MAINTENANCE EXPENSES:	
Production	77,691
Transmission	13,633
Distribution	29,420
Customer Account	12,358
Allowance for Uncollectible Accounts	1,302
Customer Service	5,514
Administration & General	87,286
TOTAL OTHER OPERATION & MAINTENANCE EXPENSES	227,204

Hawaiian Electric Company, Inc.

Interim w/CT1 at avg cost
SUPPORT WORKSHEET
2009

TOTAL FUEL OIL & PP AND OTH O&M EXPENSES (LABOR/NONLABOR)		
Fuel Oil Expense		431,206
Purchase Power Expense		346,467
Total Labor Expense		
Labor Expense		96,094
Total Labor Expense		96,094
Total Nonlabor Expense		
Nonlabor Expense		131,703
Fuel Related Expense		6,549
Payroll Taxes		6,940
Bad Debt Expense		(1,302)
Pension Expense & Amortization		(22,274)
		121,616
TOTAL FUEL OIL & PP, OTH O&M AND PR TAX EXPENSES		995,383
REVENUE TAX		
Public Service Tax		
Electric Sales Revenues		1,292,685
Other Operating Revenues		4,140
Less: Bad Debt Expense		(1,302)
Operating Revenues subject to PSC Tax		1,295,523
Public Service Tax Rate	x	5.885%
Total PSC Tax		76,242
PUC Fees		
Electric Sales Revenues		1,292,685
Other Operating Revenues		4,140
Less: Bad Debt Expense		(1,302)
Operating Revenues subject to PSC Tax		1,295,523
PUC Tax Rate	x	0.500%
Total PUC Tax		6,478

Hawaiian Electric Company, Inc.

Interim w/CT1 at avg cost
SUPPORT WORKSHEET
2009

Franchise Tax		
Electric Sales Revenues		1,292,685
Less: Bad Debt Expense		(1,302)
		1,291,383
Franchise Tax Rate	x	2.500%
Total Franchise Tax		32,285
TOTAL REVENUE TAX		115,004
INTEREST EXPENSE:		
Weighted Cost of Debt		
Short-Term Debt		0.000%
Long-Term Debt		2.368%
Hybrid Securities		0.146%
Total		2.514%
Rate Base at Proposed Rates	x	1,250,907
TOTAL INTEREST EXPENSE		31,448
INCOME TAX EXPENSE SUMMARY		
Current		(6,099)
Deferred		24,041
State ITC		0
TOTAL INCOME TAX EXPENSE		17,942
CALCULATIONS OF REVENUE TAX RATE:		
Franchise Tax Rate adjusted for Change in Oth Oper Revenues and Bad Debt		0.02498
PSC Tax Rate adjusted for Bad Debt		0.05885
PUC Tax Rate adjusted for Bad Debt		0.00500
REVENUE TAX RATE		0.08883
CALCULATIONS OF COMPOSITE INCOME TAX RATE:		
State Tax Rate		0.06015
Federal Tax Rate		0.35000
State Tax Rate		0.06015
Federal Tax Rate	x	0.35000
Federal Tax Effect on State Tax		(0.02105)
COMPOSITE INCOME TAX RATE		0.38910

Hawaiian Electric Company, Inc.

Interim w/CT1 at avg cost
SUPPORT WORKSHEET
2009

CALCULATIONS OF COMPOSITE CAPITAL GAINS TAX RATE:		
State Capital Gains Tax Rate		0.03759
Federal Tax Rate		0.35000
State Capital Gains Tax Rate		0.03759
Federal Tax Rate	x	0.35000
Federal Tax Effect on State Capital Gains Tax Rate		(0.01316)
COMPOSITE CAPITAL GAINS TAX RATE		0.37444
CALCULATIONS OF EFFECTIVE INCOME TAX RATE:		
PSC Tax & PUC Fees Rates adjusted for Bad Debt		0.06385
Franchise Tax adjusted for Change in Oth Oper Rev and Bad Debt		0.02498
Bad Debt Rate adjusted for Change in Oth Oper Rev		-
Revenue Tax and Bad Debt rate		0.08883
Rev Tax & Bad Debt Reciprocal (1 - 0.08883)		0.91117
Composite Income Tax Rate	x	0.38910
EFFECTIVE INCOME TAX RATE AFTER CONSIDERING REVENUE TAX & BAD DEBT		0.35453
CALCULATIONS OF OPERATING INCOME DIVISOR:		
PSC Tax & PUC Fees Rates		0.06385
Franchise Tax adjusted for Change in Oth Oper Rev		0.02498
Bad Debt Rate adjusted for Change in Oth Oper Rev		-
Effective Income Tax Rate after considering revenue tax & bad debt		0.35453
		0.44337
OPERATING INCOME DIVISOR (1 - 0.44337)		0.55663

Hawaiian Electric Company, Inc.
Interim w/CT1 at avg cost w/o Water Treatment
Results of Operations
2009
($ Thousands)

	Current Effective Rates	Additional Amount	Revenue Requirements to Produce 8.45% Return on Average Rate Base
Electric Sales Revenue	1,292,685	73,276	1,365,961
Other Operating Revenue	4,140	51	4,191
Gain on Sale of Land	615		615
TOTAL OPERATING REVENUES	1,297,440	73,327	1,370,767
Fuel	438,348		438,348
Purchased Power	346,467		346,467
Production	77,679		77,679
Transmission	13,633		13,633
Distribution	29,420		29,420
Customer Accounts	12,358		12,358
Allowance for Uncoll. Accounts	1,302	0	1,302
Customer Service	5,514		5,514
Administration & General	87,286		87,286
Operation and Maintenance	1,012,007	0	1,012,007
Depreciation & Amortization	81,868		81,868
Amortization of State ITC	(1,453)		(1,453)
Taxes Other Than Income	121,945	6,514	128,459
Interest on Customer Deposits	479		479
Income Taxes	17,977	25,997	43,974
TOTAL OPERATING EXPENSES	1,232,823	32,511	1,265,334
OPERATING INCOME	64,617	40,816	105,433
AVERAGE RATE BASE	1,248,383	(661)	1,247,722
RATE OF RETURN ON AVERAGE RATE BASE	5.18%		8.45%

Hawaiian Electric Company, Inc.

Interim w/CT1 at avg cost w/o Water Treatment
COMPOSITE EMBEDDED COST OF CAPITAL
Estimated 2009 Average

	A	B	C	D
	Capitalization			
	Amount in Thousands	Percent of Total	Earnings Reqmts	Weighted Earnings Reqmts (B) x (C)
Short-Term Debt	0	0	0.75%	0.000%
Long-Term Debt	576,569	40.76	5.81%	2.368%
Hybrid Securities	27,775	1.96	7.41%	0.146%
Preferred Stock	20,696	1.46	5.48%	0.080%
Common Equity	789,374	55.81	10.50%	5.860%
Total	1,414,414	100.00		
Estimated Composite Cost of Capital				8.454%
			or	8.45%

Hawaiian Electric Company, Inc.

Interim w/CT1 at avg cost w/o Water Treatment
2009 AVERAGE RATE BASE
($ Thousands)

	Beginning Balance	End of Year Balance	Average Balance
Investments in Assets Serving Customers			
Net Cost of Plant in Service	1,365,578	1,568,985	1,467,282
Property Held for Future Use	2,331	2,331	2,331
Fuel Inventory	43,274	43,274	43,274
Materials & Supplies Inventories	16,391	15,972	16,182
Unamort. Net SFAS 109 Reg. Asset	57,753	62,718	60,236
Unamort Sys Dev Costs	4,684	7,936	6,310
RO Pipeline Reg Asset	0	6,366	3,183
ARO Reg Asset	10	12	11
Total Investments in Assets	1,490,021	1,707,594	1,598,809
Funds From Non-Investors			
Unamortized CIAC	178,757	183,375	181,066
Customer Advances	947	807	877
Customer Deposits	8,201	8,581	8,391
Accumulated Def. Income Taxes	132,510	156,427	144,469
Unamort State ITC (Gross)	30,102	28,650	29,376
Unamortized Gain on Sale	1,345	746	1,046
Pension Reg Liability	3,051	-3,454	-202
OPEB Reg Liability	777	433	605
Total Deductions	355,690	375,565	365,628
Difference			1,233,181
Working Cash at Current Effective Rates			15,202
Rate Base at Current Effective Rates			1,248,383
Change in Rate Base - Working Cash			(661)
Rate Base at Proposed Rates			1,247,722

Hawaiian Electric Company, Inc.

Interim w/CT1 at avg cost w/o Water Treatment
WORKING CASH ITEMS
2009
($ Thousands)

	A COLLECTION LAG (DAYS)	B PAYMENT LAG (DAYS)	C NET COLLECTION LAG (DAYS) (A - B)	D ANNUAL AMOUNT
ITEMS REQUIRING WORKING CASH				
Fuel Oil Purchases	37	17	20	431,206
O&M Labor	37	11	26	96,094
O&M Nonlabor	37	33	4	121,604
ITEMS THAT PROVIDE WORKING CASH				
Revenue Taxes	37	66	(29)	115,004
Income Taxes-Curr Eff Rates	37	39	(2)	(5,940)
Income Taxes-Proposed Rates	37	39	(2)	20,057
Purchased Power	37	37	0	346,467

	E AVERAGE DAILY AMOUNT (D/365)	F WORKING CASH (CURR EFF RATES) (C X E)	G AVERAGE DAILY AMOUNT (PROPOSED)	H WORKING CASH (PROPOSED RATES) (C X G)
ITEMS REQUIRING WORKING CASH				
Fuel Oil Purchases	1,181	23,628	1,181	23,628
O&M Labor	263	6,845	263	6,845
O&M Nonlabor	333	1,333	333	1,333
ITEMS THAT PROVIDE WORKING CASH				
Purchased Power	949	0	949	0
Revenue Taxes	315	(9,137)	333	(9,655)
Income Taxes-Curr Eff Rates	(16)	33		
Income Taxes-Proposed Rates	55	-	55	(110)
Settlement Adjustment		(7,500)		(7,500)
Total		15,202		14,541
Change in Working Cash				(661)

Hawaiian Electric Company, Inc.

Interim w/CT1 at avg cost w/o Water Treatment
COMPUTATION OF INCOME TAX EXPENSE
2009
($ Thousands)

	Current Effective Rates	Adjustment	At Proposed Rates
Operating Revenues	1,297,440	73,327	1,370,767
Operating Expenses:			
Fuel Oil and Purchased Power	784,815		784,815
Other Operation & Maintenance Expense	227,192	0	227,192
Depreciation	81,868		81,868
Amortization of State ITC	(1,453)		(1,453)
Taxes Other than Income	121,945	6,514	128,459
Interest on Customer Deposits	479		479
Total Operating Expenses	1,214,846	6,514	1,221,360
Operating Income Before Income Taxes	82,594	66,813	149,407
Tax Adjustments:			
Interest Expense	(31,368)		(31,368)
Meals and Entertainment	78		78
	(31,290)	0	(31,290)
Taxable Income at Ordinary Rates	51,304	66,813	118,117
Income Tax Exp at Ordinary Rates	19,962	25,997	45,959
Tax Benefit of Domestic Production Activities Deduction	1,747		1,747
Tax Effect of Deductible Preferred Stock Dividends	23		23
R&D Credit	215		215
TOTAL INCOME TAX EXPENSE	17,977	25,997	43,974

Hawaiian Electric Company, Inc.

Interim w/CT1 at avg cost w/o Water Treatment
COMPUTATION OF TAXES OTHER THAN INCOME TAX
2009
($ Thousands)

	Rate	Current Effective Rates	Adjustment	At Proposed Rates
Electric Sales Revenue		1,292,685	73,276	1,365,961
Other Operating Revenue		4,140	51	4,191
Operating Revenues		1,296,825	73,327	1,370,152
Public Service Tax	5.885%	76,242	4,315	80,557
PUC Fees	0.500%	6,478	367	6,845
Franchise Tax	2.500%	32,285	1,832	34,117
Payroll Tax		6,940		6,940
TOTAL TAXES OTHER THAN INCOME TAX		121,945	6,514	128,459

Hawaiian Electric Company, Inc.

Interim w/CT1 at avg cost w/o Water Treatment
CALCULATIONS OF REVENUE REQUIREMENTS
2009
($ Thousands)

OPERATING INCOME AT CURRENT EFFECTIVE RATES:		
Operating Revenues		1,297,440
Fuel and Purchased Power Expenses		784,815
Other O&M Expenses		227,192
Depreciation & Amortization Expense		81,868
Amortization of State ITC		(1,453)
Taxes Other than Income		121,945
Interest on Customer Deposits		479
Income Taxes		17,977
Total Operating Expenses		1,232,823
OPERATING INCOME AT CURRENT EFFECTIVE RATES		64,617
CALCULATIONS OF REVENUE REQUIREMENTS:		
OPERATING INCOME		
Rate Base at Proposed Rates		1,247,722
Proposed Rate of Return on Rate Base	x	8.45%
Operating Income		105,433
Less: Operating Income at Current Effective Rate		64,617
INCREASE IN OPERATING INCOME		40,816
OPERATING REVENUES:		
Increase in Operating Income		40,816
Operating Income Divisor (divided by)		0.55663
INCREASE IN OPERATING REVENUES		73,327
Increase in Electric Sales Revenue		73,276
Other Operating Revenue Rate	x	0.070%
Increase in Other Operating Revenues		51
		73,327

Hawaiian Electric Company, Inc.

Interim w/CT1 at avg cost w/o Water Treatment
CALCULATIONS OF REVENUE REQUIREMENTS
2009
($ Thousands)

BAD DEBT:		
Increase in Electric Revenues		73,276
Bad Debt Rate	x	0.0000
INCREASE IN BAD DEBT EXPENSE		0
REVENUE TAX:		
Increase in Operating Revenues		73,327
Less: Increase in Bad Debt Expense		0
		73,327
PSC Tax & PUC Fees Rate	x	6.385%
		4,682
Increase in Electric Revenues		73,276
Less: Increase in Bad Debt Expense		0
		73,276
Franchise Tax Rate	x	2.500%
		1,832
INCREASE IN REVENUE TAX		6,514
INCOME TAX:		
Increase in Operating Revenues		73,327
Effective Income Tax Rate after considering revenue tax & bad debt	x	35.453%
INCREASE IN INCOME TAX		25,997
INCREASE IN OPERATING INCOME (check)		40,816

Hawaiian Electric Company, Inc.

Interim w/CT1 at avg cost w/o Water Treatment
CALCULATIONS OF REVENUE REQUIREMENTS
2009
($ Thousands)

CHANGE IN RATE BASE:

	A EXPENSE AMOUNT	B AVERAGE DAILY AMOUNT (A/365)	C NET COLLECTION LAG (DAYS)	D WORKING CASH REQMT (B)x(C)
Increase in Revenue Tax	6,514	18	(29)	(518)
Income Tax at curr eff rate	(5,940)	(16)	(2)	(33)
Income Tax at proposed rate	20,057	55	(2)	(110)
CHANGE IN RATE BASE - WORKING CASH				(661)
Rate Base at Current Effective Rates				1,248,383
PROPOSED RATE BASE				1,247,722

Operating Income at Current Effective Rates	64,617
Increase in Operating Income	40,816
OPERATING INCOME AT PROPOSED RATES	105,433
PROPOSED RATE OF RETURN ON RATE BASE (check)	8.45%

Hawaiian Electric Company, Inc.

Interim w/CT1 at avg cost w/o Water Treatment
SUPPORT WORKSHEET
2009

OPERATING REVENUES:	
Electric Sales Revenues	1,292,685
Other Operating Revenues	4,140
Gain on Sale of Land	615
TOTAL OPERATING REVENUES	1,297,440
FUEL OIL AND PURCHASE POWER EXPENSES:	
Fuel Oil Expense	431,206
Fuel Related Non-labor Exp	6,549
Fuel Handling Labor Expense	593
Fuel Oil Expense	438,348
Purchased Power Expense	346,467
TOTAL FUEL OIL AND PURCHASE POWER EXPENSES	784,815
OTHER OPERATION & MAINTENANCE EXPENSES:	
Production	77,679
Transmission	13,633
Distribution	29,420
Customer Account	12,358
Allowance for Uncollectible Accounts	1,302
Customer Service	5,514
Administration & General	87,286
TOTAL OTHER OPERATION & MAINTENANCE EXPENSES	227,192

Hawaiian Electric Company, Inc.

Interim w/CT1 at avg cost w/o Water Treatment
SUPPORT WORKSHEET
2009

TOTAL FUEL OIL & PP AND OTH O&M EXPENSES (LABOR/NONLABOR)		
Fuel Oil Expense		431,206
Purchase Power Expense		346,467
Total Labor Expense		
Labor Expense		96,094
Total Labor Expense		96,094
Total Nonlabor Expense		
Nonlabor Expense		131,691
Fuel Related Expense		6,549
Payroll Taxes		6,940
Bad Debt Expense		(1,302)
Pension Expense & Amortization		(22,274)
		121,604
TOTAL FUEL OIL & PP, OTH O&M AND PR TAX EXPENSES		995,371
REVENUE TAX		
Public Service Tax		
Electric Sales Revenues		1,292,685
Other Operating Revenues		4,140
Less: Bad Debt Expense		(1,302)
Operating Revenues subject to PSC Tax		1,295,523
Public Service Tax Rate	x	5.885%
Total PSC Tax		76,242
PUC Fees		
Electric Sales Revenues		1,292,685
Other Operating Revenues		4,140
Less: Bad Debt Expense		(1,302)
Operating Revenues subject to PSC Tax		1,295,523
PUC Tax Rate	x	0.500%
Total PUC Tax		6,478

Hawaiian Electric Company, Inc.

Interim w/CT1 at avg cost w/o Water Treatment
SUPPORT WORKSHEET
2009

Franchise Tax		
Electric Sales Revenues		1,292,685
Less: Bad Debt Expense		(1,302)
		1,291,383
Franchise Tax Rate	x	2.500%
Total Franchise Tax		32,285
TOTAL REVENUE TAX		115,004
INTEREST EXPENSE:		
Weighted Cost of Debt		
Short-Term Debt		0.000%
Long-Term Debt		2.368%
Hybrid Securities		0.146%
Total		2.514%
Rate Base at Proposed Rates	x	1,247,722
TOTAL INTEREST EXPENSE		31,368
INCOME TAX EXPENSE SUMMARY		
Current		(5,940)
Deferred		23,917
State ITC		0
TOTAL INCOME TAX EXPENSE		17,977
CALCULATIONS OF REVENUE TAX RATE:		
Franchise Tax Rate adjusted for Change in Oth Oper Revenues and Bad Debt		0.02498
PSC Tax Rate adjusted for Bad Debt		0.05885
PUC Tax Rate adjusted for Bad Debt		0.00500
REVENUE TAX RATE		0.08883
CALCULATIONS OF COMPOSITE INCOME TAX RATE:		
State Tax Rate		0.06015
Federal Tax Rate		0.35000
State Tax Rate		0.06015
Federal Tax Rate	x	0.35000
Federal Tax Effect on State Tax		(0.02105)
COMPOSITE INCOME TAX RATE		0.38910

Hawaiian Electric Company, Inc.

Interim w/CT1 at avg cost w/o Water Treatment
SUPPORT WORKSHEET
2009

CALCULATIONS OF COMPOSITE CAPITAL GAINS TAX RATE:		
State Capital Gains Tax Rate		0.03759
Federal Tax Rate		0.35000
State Capital Gains Tax Rate		0.03759
Federal Tax Rate	x	0.35000
Federal Tax Effect on State Capital Gains Tax Rate		(0.01316)
COMPOSITE CAPITAL GAINS TAX RATE		0.37444
CALCULATIONS OF EFFECTIVE INCOME TAX RATE:		
PSC Tax & PUC Fees Rates adjusted for Bad Debt		0.06385
Franchise Tax adjusted for Change in Oth Oper Rev and Bad Debt		0.02498
Bad Debt Rate adjusted for Change in Oth Oper Rev		-
Revenue Tax and Bad Debt rate		0.08883
Rev Tax & Bad Debt Reciprocal (1 - 0.08883)		0.91117
Composite Income Tax Rate	x	0.38910
EFFECTIVE INCOME TAX RATE AFTER CONSIDERING REVENUE TAX & BAD DEBT		0.35453
CALCULATIONS OF OPERATING INCOME DIVISOR:		
PSC Tax & PUC Fees Rates		0.06385
Franchise Tax adjusted for Change in Oth Oper Rev		0.02498
Bad Debt Rate adjusted for Change in Oth Oper Rev		-
Effective Income Tax Rate after considering revenue tax & bad debt		0.35453
		0.44337
OPERATING INCOME DIVISOR (1 - 0.44337)		0.55663

EXHIBIT 2

Hawaiian Electric Company, Inc.
Interim at Curr Eff Rates
Results of Operations
2009
($ Thousands)

	Current Effective Rates	Additional Amount	Revenue Requirements to Produce 8.45% Return on Average Rate Base
Electric Sales Revenue	1,292,685	60,992	1,353,677
Other Operating Revenue	4,140	106	4,246
Gain on Sale of Land	615		615
TOTAL OPERATING REVENUES	1,297,440	61,098	1,358,538
Fuel	438,348		438,348
Purchased Power	346,467		346,467
Production	76,322		76,322
Transmission	13,633		13,633
Distribution	29,420		29,420
Customer Accounts	12,358		12,358
Allowance for Uncoll. Accounts	1,302	0	1,302
Customer Service	5,514		5,514
Administration & General	87,148		87,148
Operation and Maintenance	1,010,512	0	1,010,512
Depreciation & Amortization	81,868		81,868
Amortization of State ITC	(1,453)		(1,453)
Taxes Other Than Income	121,897	5,426	127,323
Interest on Customer Deposits	479		479
Income Taxes	19,331	21,662	40,993
TOTAL OPERATING EXPENSES	1,232,634	27,088	1,259,722
OPERATING INCOME	64,806	34,010	98,816
AVERAGE RATE BASE	1,169,973	(550)	1,169,423
RATE OF RETURN ON AVERAGE RATE BASE	5.54%		8.45%

Hawaiian Electric Company, Inc.

Interim at Curr Eff Rates
COMPOSITE EMBEDDED COST OF CAPITAL
Estimated 2009 Average

	A	B	C	D
	Capitalization			
	Amount in Thousands	Percent of Total	Earnings Reqmts	Weighted Earnings Reqmts (B) x (C)
Short-Term Debt	0	0	0.75%	0.000%
Long-Term Debt	576,569	40.76	5.81%	2.368%
Hybrid Securities	27,775	1.96	7.41%	0.146%
Preferred Stock	20,696	1.46	5.48%	0.080%
Common Equity	789,374	55.81	10.50%	5.860%
Total	1,414,414	100.00		
Estimated Composite Cost of Capital				8.454%
			or	8.45%

Hawaiian Electric Company, Inc.

Interim at Curr Eff Rates
2009 AVERAGE RATE BASE
($ Thousands)

	Beginning Balance	End of Year Balance	Average Balance
Investments in Assets Serving Customers			
Net Cost of Plant in Service	1,359,458	1,414,065	1,386,762
Property Held for Future Use	2,331	2,331	2,331
Fuel Inventory	43,274	43,274	43,274
Materials & Supplies Inventories	16,391	15,972	16,182
Unamort. Net SFAS 109 Reg. Asset	57,753	62,718	60,236
Unamort Sys Dev Costs	4,684	7,936	6,310
RO Pipeline Reg Asset	0	6,366	3,183
ARO Reg Asset	10	12	11
Total Investments in Assets	1,483,901	1,552,674	1,518,289
Funds From Non-Investors			
Unamortized CIAC	178,757	183,375	181,066
Customer Advances	947	807	877
Customer Deposits	8,201	8,581	8,391
Accumulated Def. Income Taxes	132,510	152,033	142,272
Unamort State ITC (Gross)	30,102	28,650	29,376
Unamortized Gain on Sale	1,345	746	1,046
Pension Reg Liability	3,051	-3,454	-202
OPEB Reg Liability	777	433	605
Total Deductions	355,690	371,171	363,431
Difference			1,154,858
Working Cash at Current Effective Rates			15,115
Rate Base at Current Effective Rates			1,169,973
Change in Rate Base - Working Cash			(550)
Rate Base at Proposed Rates			1,169,423

Hawaiian Electric Company, Inc.

Interim at Curr Eff Rates
WORKING CASH ITEMS
2009
($ Thousands)

	A COLLECTION LAG (DAYS)	B PAYMENT LAG (DAYS)	C NET COLLECTION LAG (DAYS) (A - B)	D ANNUAL AMOUNT
ITEMS REQUIRING WORKING CASH				
Fuel Oil Purchases	37	17	20	431,206
O&M Labor	37	11	26	95,455
O&M Nonlabor	37	33	4	120,700
ITEMS THAT PROVIDE WORKING CASH				
Revenue Taxes	37	66	(29)	115,004
Income Taxes-Curr Eff Rates	37	39	(2)	(192)
Income Taxes-Proposed Rates	37	39	(2)	21,470
Purchased Power	37	37	0	346,467

	E AVERAGE DAILY AMOUNT (D/365)	F WORKING CASH (CURR EFF RATES) (C X E)	G AVERAGE DAILY AMOUNT (PROPOSED)	H WORKING CASH (PROPOSED RATES) (C X G)
ITEMS REQUIRING WORKING CASH				
Fuel Oil Purchases	1,181	23,628	1,181	23,628
O&M Labor	262	6,800	262	6,800
O&M Nonlabor	331	1,323	331	1,323
ITEMS THAT PROVIDE WORKING CASH				
Purchased Power	949	0	949	0
Revenue Taxes	315	(9,137)	330	(9,568)
Income Taxes-Curr Eff Rates	(1)	1		
Income Taxes-Proposed Rates	59	-	59	(118)
Settlement Adjustment		(7,500)		(7,500)
Total		15,115		14,565
Change in Working Cash				(550)

Hawaiian Electric Company, Inc.

Interim at Curr Eff Rates
COMPUTATION OF INCOME TAX EXPENSE
2009
($ Thousands)

	Current Effective Rates	Adjustment	At Proposed Rates
Operating Revenues	1,297,440	61,098	1,358,538
Operating Expenses:			
Fuel Oil and Purchased Power	784,815		784,815
Other Operation & Maintenance Expense	225,697	0	225,697
Depreciation	81,868		81,868
Amortization of State ITC	(1,453)		(1,453)
Taxes Other than Income	121,897	5,426	127,323
Interest on Customer Deposits	479		479
Total Operating Expenses	1,213,303	5,426	1,218,729
Operating Income Before Income Taxes	84,137	55,672	139,809
Tax Adjustments:			
Interest Expense	(29,399)		(29,399)
Meals and Entertainment	78		78
	(29,321)	0	(29,321)
Taxable Income at Ordinary Rates	54,816	55,672	110,488
Income Tax Exp at Ordinary Rates	21,329	21,662	42,991
Tax Benefit of Domestic Production Activities Deduction	1,760		1,760
Tax Effect of Deductible Preferred Stock Dividends	23		23
R&D Credit	215		215
TOTAL INCOME TAX EXPENSE	19,331	21,662	40,993

Hawaiian Electric Company, Inc.

Interim at Curr Eff Rates
COMPUTATION OF TAXES OTHER THAN INCOME TAX
2009
($ Thousands)

	Rate	Current Effective Rates	Adjustment	At Proposed Rates
Electric Sales Revenue		1,292,685	60,992	1,353,677
Other Operating Revenue		4,140	106	4,246
Operating Revenues		1,296,825	61,098	1,357,923
Public Service Tax	5.885%	76,242	3,596	79,838
PUC Fees	0.500%	6,478	305	6,783
Franchise Tax	2.500%	32,285	1,525	33,810
Payroll Tax		6,892		6,892
TOTAL TAXES OTHER THAN INCOME TAX		121,897	5,426	127,323

Hawaiian Electric Company, Inc.

Interim at Curr Eff Rates
CALCULATIONS OF REVENUE REQUIREMENTS
2009
($ Thousands)

OPERATING INCOME AT CURRENT EFFECTIVE RATES:		
Operating Revenues		1,297,440
Fuel and Purchased Power Expenses		784,815
Other O&M Expenses		225,697
Depreciation & Amortization Expense		81,868
Amortization of State ITC		(1,453)
Taxes Other than Income		121,897
Interest on Customer Deposits		479
Income Taxes		19,331
Total Operating Expenses		1,232,634
OPERATING INCOME AT CURRENT EFFECTIVE RATES		64,806
CALCULATIONS OF REVENUE REQUIREMENTS:		
OPERATING INCOME		
Rate Base at Proposed Rates		1,169,423
Proposed Rate of Return on Rate Base	x	8.45%
Operating Income		98,816
Less: Operating Income at Current Effective Rate		64,806
INCREASE IN OPERATING INCOME		34,010
OPERATING REVENUES:		
Increase in Operating Income		34,010
Operating Income Divisor (divided by)		0.55665
INCREASE IN OPERATING REVENUES		61,098
Increase in Electric Sales Revenue		60,992
Other Operating Revenue Rate	x	0.174%
Increase in Other Operating Revenues		106
		61,098

Hawaiian Electric Company, Inc.

Interim at Curr Eff Rates
CALCULATIONS OF REVENUE REQUIREMENTS
2009
($ Thousands)

BAD DEBT:		
Increase in Electric Revenues		60,992
Bad Debt Rate	x	0.0000
INCREASE IN BAD DEBT EXPENSE		0
REVENUE TAX:		
Increase in Operating Revenues		61,098
Less: Increase in Bad Debt Expense		0
		61,098
PSC Tax & PUC Fees Rate	x	6.385%
		3,901
Increase in Electric Revenues		60,992
Less: Increase in Bad Debt Expense		0
		60,992
Franchise Tax Rate	x	2.500%
		1,525
INCREASE IN REVENUE TAX		5,426
INCOME TAX:		
Increase in Operating Revenues		61,098
Effective Income Tax Rate after considering revenue tax & bad debt	x	35.454%
INCREASE IN INCOME TAX		21,662
INCREASE IN OPERATING INCOME (check)		34,010

Hawaiian Electric Company, Inc.

Interim at Curr Eff Rates
CALCULATIONS OF REVENUE REQUIREMENTS
2009
($ Thousands)

CHANGE IN RATE BASE:

	A EXPENSE AMOUNT	B AVERAGE DAILY AMOUNT (A/365)	C NET COLLECTION LAG (DAYS)	D WORKING CASH REQMT (B)x(C)
Increase in Revenue Tax	5,426	15	(29)	(431)
Income Tax at curr eff rate	(192)	(1)	(2)	(1)
Income Tax at proposed rate	21,470	59	(2)	(118)
CHANGE IN RATE BASE - WORKING CASH				(550)
Rate Base at Current Effective Rates				1,169,973
PROPOSED RATE BASE				1,169,423
Operating Income at Current Effective Rates				64,806
Increase in Operating Income				34,010
OPERATING INCOME AT PROPOSED RATES				98,816
PROPOSED RATE OF RETURN ON RATE BASE (check)				8.45%

Hawaiian Electric Company, Inc.

Interim at Curr Eff Rates
SUPPORT WORKSHEET
2009

OPERATING REVENUES:	
Electric Sales Revenues	1,292,685
Other Operating Revenues	4,140
Gain on Sale of Land	615
TOTAL OPERATING REVENUES	1,297,440
FUEL OIL AND PURCHASE POWER EXPENSES:	
Fuel Oil Expense	431,206
Fuel Related Non-labor Exp	6,549
Fuel Handling Labor Expense	593
Fuel Oil Expense	438,348
Purchased Power Expense	346,467
TOTAL FUEL OIL AND PURCHASE POWER EXPENSES	784,815
OTHER OPERATION & MAINTENANCE EXPENSES:	
Production	76,322
Transmission	13,633
Distribution	29,420
Customer Account	12,358
Allowance for Uncollectible Accounts	1,302
Customer Service	5,514
Administration & General	87,148
TOTAL OTHER OPERATION & MAINTENANCE EXPENSES	225,697

Hawaiian Electric Company, Inc.

Interim at Curr Eff Rates
SUPPORT WORKSHEET
2009

TOTAL FUEL OIL & PP AND OTH O&M EXPENSES (LABOR/NONLABOR)		
Fuel Oil Expense		431,206
Purchase Power Expense		346,467
Total Labor Expense		
Labor Expense		95,455
Total Labor Expense		95,455
Total Nonlabor Expense		
Nonlabor Expense		130,835
Fuel Related Expense		6,549
Payroll Taxes		6,892
Bad Debt Expense		(1,302)
Pension Expense & Amortization		(22,274)
		120,700
TOTAL FUEL OIL & PP, OTH O&M AND PR TAX EXPENSES		993,828
REVENUE TAX		
Public Service Tax		
Electric Sales Revenues		1,292,685
Other Operating Revenues		4,140
Less: Bad Debt Expense		(1,302)
Operating Revenues subject to PSC Tax		1,295,523
Public Service Tax Rate	x	5.885%
Total PSC Tax		76,242
PUC Fees		
Electric Sales Revenues		1,292,685
Other Operating Revenues		4,140
Less: Bad Debt Expense		(1,302)
Operating Revenues subject to PSC Tax		1,295,523
PUC Tax Rate	x	0.500%
Total PUC Tax		6,478

Hawaiian Electric Company, Inc.

Interim at Curr Eff Rates
SUPPORT WORKSHEET
2009

Franchise Tax		
Electric Sales Revenues		1,292,685
Less: Bad Debt Expense		(1,302)
		1,291,383
Franchise Tax Rate	x	2.500%
Total Franchise Tax		32,285
TOTAL REVENUE TAX		115,004
INTEREST EXPENSE:		
Weighted Cost of Debt		
Short-Term Debt		0.000%
Long-Term Debt		2.368%
Hybrid Securities		0.146%
Total		2.514%
Rate Base at Proposed Rates	x	1,169,423
TOTAL INTEREST EXPENSE		29,399
INCOME TAX EXPENSE SUMMARY		
Current		(192)
Deferred		19,523
State ITC		0
TOTAL INCOME TAX EXPENSE		19,331
CALCULATIONS OF REVENUE TAX RATE:		
Franchise Tax Rate adjusted for Change in Oth Oper Revenues and Bad Debt		0.02496
PSC Tax Rate adjusted for Bad Debt		0.05885
PUC Tax Rate adjusted for Bad Debt		0.00500
REVENUE TAX RATE		0.08881
CALCULATIONS OF COMPOSITE INCOME TAX RATE:		
State Tax Rate		0.06015
Federal Tax Rate		0.35000
State Tax Rate		0.06015
Federal Tax Rate	x	0.35000
Federal Tax Effect on State Tax		(0.02105)
COMPOSITE INCOME TAX RATE		0.38910

Hawaiian Electric Company, Inc.

Interim at Curr Eff Rates
SUPPORT WORKSHEET
2009

CALCULATIONS OF COMPOSITE CAPITAL GAINS TAX RATE:		
State Capital Gains Tax Rate		0.03759
Federal Tax Rate		0.35000
State Capital Gains Tax Rate		0.03759
Federal Tax Rate	x	0.35000
Federal Tax Effect on State Capital Gains Tax Rate		(0.01316)
COMPOSITE CAPITAL GAINS TAX RATE		0.37444
CALCULATIONS OF EFFECTIVE INCOME TAX RATE:		
PSC Tax & PUC Fees Rates adjusted for Bad Debt		0.06385
Franchise Tax adjusted for Change in Oth Oper Rev and Bad Debt		0.02496
Bad Debt Rate adjusted for Change in Oth Oper Rev		-
Revenue Tax and Bad Debt rate		0.08881
Rev Tax & Bad Debt Reciprocal	(1 - 0.08881)	0.91119
Composite Income Tax Rate	x	0.38910
EFFECTIVE INCOME TAX RATE AFTER CONSIDERING REVENUE TAX & BAD DEBT		0.35454
CALCULATIONS OF OPERATING INCOME DIVISOR:		
PSC Tax & PUC Fees Rates		0.06385
Franchise Tax adjusted for Change in Oth Oper Rev		0.02496
Bad Debt Rate adjusted for Change in Oth Oper Rev		-
Effective Income Tax Rate after considering revenue tax & bad debt		0.35454
		0.44335
OPERATING INCOME DIVISOR	(1 - 0.44335)	0.55665

STATEMENT OF FACTS

STATEMENT OF FACTS

I. BACKGROUND

Application

One of the primary drivers for this rate case was to provide the vehicle for the recovery of revenue requirements arising out of the addition of Hawaiian Electric's new generating unit, CIP CT-1. Of the revenue increase of approximately $97 million requested in the Application filed July 3, 2008, approximately $23.9 million was included in the requested CIP CT-1 step increase to be effective when the generating unit was placed in service. HECO-101 at 3; HECO T-1 at 6-7.

Hawaiian Electric's revenue requirements in its Application were based on including the "full" cost of CIP CT-1 (as estimated at the time of the Application), and Hawaiian Electric proposed an interim step increase that did not include the CIP CT-1 cost, and a later step increase when CIP CT-1 went into service at the end of July 2009 that was based on the full incremental cost of adding CIP CT-1 (excluding depreciation, which does not begin until the following year)[1]:

Step Increase	Amount ($1,000)	Effective Date
1) Interim Increase	$73,064	On or before May 1, 2009
2) CIP CT-1 Step Increase	$23,947	At the in-service date of CIP CT-1 (scheduled for July 31, 2009)
3) General Increase	Balance	Final Decision and Order
Total Rate Increase	$97,011	

[1] HECO-101 at 4.

The purpose of the CIP CT-1 Step Increase was to enable the Company to recover the full cost of CIP CT-1 after the generating unit went into service. (The CIP CT-1 Step Increase was equal to the difference between the revenue requirement reflecting the full annualized cost of CIP CT-1 [with the net investment of CIP CT-1 in both the beginning and end of test year balances] and the revenue requirement exclusive of the cost of CIP CT-1.)

There were a number of important reasons for proposing the CIP CT-1 Step Increase. First, Hawaiian Electric incurred substantial costs for the CIP CT-1 generating unit, and proposed that it should be allowed to recover the full amount of the costs it incurred for CIP CT-1 as soon as it begins incurring the costs. In addition, the use of a step increase would ensure that customers would not have to pay for the costs of CIP CT-1 until Hawaiian Electric begins incurring such costs. The use of a step increase would better time the revenue increase to match the cost increase that necessitated the proposed step increase.[2] See HECO T-1 at 15-19.

Stipulated Settlement Letter

The Consumer Advocate and the DOD opposed inclusion of the "full" cost of CIP CT-1 in revenue requirements, and proposed that a fully average test year be used. Based on the joint decoupling proposal of the Company and the Consumer Advocate in Docket No. 2008-0274 (Decoupling Docket), which incorporated a revenue adjustment mechanism rate base adjustment in 2010 that included actual year-end 2009 plant balances (as well as conservatively estimated plant additions in 2010), Hawaiian Electric (as part of the global settlement agreement) agreed to

[2] Hawaiian Electric proposed alternatives to the CIP CT-1 Step Increase. If the Commission rejected the CIP CT-1 Step Increase, Hawaiian Electric proposed an interim increase of approximately $85 million as shown on HECO-2303 rather than approximately $73 million. The interim increase of approximately $85 million (referred to as "Base Case" in the Company's written testimonies in this proceeding) included the 2009 CIP CT-1 plant additions (net of deferred income taxes) in the end of test year rate base balance but not in the beginning of test year rate base balance. HECO T-1 at 7.

the use of the fully average test year, without a separate CIP CT-1 Step Increase or annualized ratemaking treatment of CIP CT-1 costs. Stipulated Settlement Letter at 90.

In addition, as part of the settlement negotiations, Hawaiian Electric reduced its Production O&M expenses by $105,000 as stated in the Company's responses to the Consumer Advocates information requests:

- $49,000 from Production Operations non-labor expense for CIP CT-1 Waste Water Treatment Chemicals as stated in Hawaiian Electric's response to CA-IR-297;
- $42,000 from Production Operations non-labor expense for CIP CT-1 Boiler Water Treatment as stated in Hawaiian Electric's response to CA-IR-297;
- $14,000 from Production Operations non-labor expense for CIP CT-1 Demin/Evap Chemicals as stated in Hawaiian Electric's response to CA-IR-468.

Stipulated Settlement Letter at 29.

Interim Decision and Order

The Commission issued Interim Decision and Order on July 2, 2009 ("ID&O") that addressed, among other things, CIP CT-1. Section II.2.(a) of the ID&O stated that the Commission denied the inclusion of any cost or rate base additions associated with the CIP CT-1 unit in interim rates. In response to the ID&O, Hawaiian Electric submitted, on July 8, 2009, revised schedules and explanations of certain adjustments to the Company's 2009 test year estimates. With respect to Section II.2.(a) of the ID&O, Hawaiian Electric made adjustments to Net Cost of Plant in Service, Production Operations and Maintenance Costs, Fuel Inventory, and Accumulated Deferred Income Taxes.

Net Cost of Plant In Service

As the Parties agreed in the Stipulated Settlement Letter, the average net cost of plant in service identified in the Statement of Probable Entitlement was $1,470,532,000,[3] which represented the average of the December 2008 recorded net cost of plant in service balance[4] and the December 2009 estimated net cost of plant in service balance as presented in the Rate Case Update.

The table below shows a list of projects which comprise the CIP CT-1 plant additions. The 2008 estimated plant additions as presented in the Rate Case Update (Rate Case Update HECO T-17, at 5) are shown in column A; the 2008 recorded plant additions (which amount to the recorded 2008 plant additions of approximately $97 million identified in the response to CA-IR-428) are shown in column B; and the 2009 estimated plant additions as presented in the Rate Case Update (Rate Case Update HECO T-17, at 5) are shown in column C.

Project #	Project Title	(A) 2008 Additions per Rate Case Update	(B) 2008 Recorded Additions	(C) 2009 Additions per Rate Case Update
P0001052	CIP1 CEIP Substation Mod	456,832		3,890
P0001135	CIP1 Unit Addition-Microwave	523,193		
P0001340	CIP1 Unit Addition-Easements	4,857,924	4,857,924	
P0001050	CIP1 AES-CEIP#2 Trans. Line			5,790,887
P0001051	CIP1 AES Substation Add			3,153,110
P0001134	CIP1 Unit Addition-Fiber			531,769
P0001136	CIP1 Unit Addition-Kahe Bkrs			1,720,778
P0001137	CIP1 Unit Addition-Kalaeloa			289,912
P4900000	CIP1 Unit 1 Addition			143,809,745
P0001585	CIP1 - Land - Gen Station	1,261,761	1,261,761	
	Total for CIP CT-1	7,099,710	6,119,686	155,300,091

Hawaiian Electric's Revised Schedules Resulting from Interim Decision and Order, Exhibit 3, HECO T-17 Attachment 1.

[3] Statement of Probable Entitlement, Exhibit 1, at 3.
[4] Stipulated Settlement Letter, Exhibit 1, at 66-67.

The adjustments made to the net cost of plant in service to remove costs associated with CIP CT-1 were:

- Downward adjustment of approximately $6,120,000 (total of column B) from the December 2008 recorded balance,
- Downward adjustment of approximately $161,420,000 ($6,120,000 (total of column B) + $155,300,000 (total of column C)) from the December 2009 estimated balance.

This resulted in an adjustment to the average balance of the net cost of plant in service from $1,470,532,000 in the Statement of Probable Entitlement[5] to $1,386,762,000 in the revised schedules filed on July 8, 2009[6], a decrease of $83,770,000 (($6,120,000+$161,420,000)/2) to the average net cost of plant in service balance.

Production Operations and Maintenance Costs

As the Parties agreed in the Stipulated Settlement Letter, the total production O&M costs identified in the Statement of Probable Entitlement was $78,973,000. Statement of Probable Entitlement, Exhibit 1, at 1. In the revised schedules submitted by Hawaiian Electric on July 8, 2009, the total downward adjustment to remove the production O&M CIP CT-1 costs from the total production O&M expense identified in the Statement of Probable Entitlement was $1,369,000. Revised Schedules Resulting from Interim Decision and Order, Attachment A, page 1, line 7, column E, and Exhibit 3, at 8.

Prior to settlement discussions and the ensuing adjustments, $1,474,000 of costs were identified with the production O&M of CIP CT-1.[7] As part of settlement negotiations and IR

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[5] Statement of Probable Entitlement, Exhibit 1, at 3.
[6] Hawaiian Electric's Revised Schedules Resulting from Interim Decision and Order, Exhibit 1, at 3.
[7] The components of the $1,474,000 CIP CT-1 Production O&M expenses are set forth in HECO T-7 Rate Case Update, Attachment 14, page 4, column F. See also HECO T-7 Rate Case Update, Attachment 14, at 3, columns D, E and F; HECO T-7 Rate Case Update, Attachment 14, at 1; and HECO T-7 Rate Case Update, Attachment 14, at 5.

response commitments, Hawaiian Electric agreed to reduce its production O&M expenses by $105,000.[8] Thus, the resulting production O&M costs associated with CT-1 was $1,369,000 as reflected in the Statement of Probable Entitlement ($1,474,000 - $105,000).

In the revised schedules submitted by Hawaiian Electric on July 8, 2009, in addition to removing $1,369,000 for Production O&M expenses for CIP CT-1, Hawaiian Electric also removed $426,000 for HCEI-related positions, $679,000 for merit employee wage increases and $177,000 in recognition of overall commodity price decreases for a total downward adjustment of $2,651,000. Revised Schedules Resulting from Interim Decision and Order, Attachment A, page 1, line 7, column H. In the present motion, Hawaiian Electric is seeking to restore to Production O&M expenses recognized in interim rates only $1,369,000 for Production O&M expenses for CIP CT-1, resulting in total Production O&M expenses, including CIP CT-1 average costs at current effective rates, in the amount of $77,691,000.

Fuel Inventory

As explained on page 70 of Exhibit 1 of the Stipulated Settlement Letter, for purposes of settlement the Parties agreed to accept Hawaiian Electric's April 2009 Update production simulation results, including Hawaiian Electric's December 2008 fuel prices, and the Company's updated average fuel inventory balance of $45,005,000 for the 2009 test year. As shown on page 8 of HECO T-5 Attachment 1 to the Stipulated Settlement Letter, the Company derived this amount by computing the average of the beginning of 2009 test year fuel inventory (without CIP CT-1) of $43,274,000 and the end of 2009 test year fuel inventory (with CIP CT-1) of $46,737,000. Because CIP CT-1 will use biodiesel for fuel and was scheduled to go into service on July 31, 2009, the beginning of test year fuel inventory does not include any biodiesel but the

[8] Stipulated Settlement Letter, Exhibit 1, page 29 summarizes the three adjustments agreed to in responses to CA-IR-297 and CA-IR-468.

end of test year fuel inventory does. Removal of CIP CT-1 from the test year required the removal of biodiesel from the end of test year fuel inventory. To be conservative, the Company used the beginning of test year balance of $43,274,000 (which does not include biodiesel) for the end of test year fuel inventory, resulting in an average annual total inventory of the same amount ($43,274,000) for the 2009 test year. As shown in Hawaiian Electric's Revised Schedules Resulting from Interim Decision and Order, Exhibit 3, HECO T-5 Attachment 1, the adjustment resulting from the ID&O was a reduction of $3,463,000 to the end of year total inventory. The adjusted average annual total inventory amount of $43,274,000 was conservative since the end of test year fuel inventory reflected in the Stipulated Settlement Letter included 780,727 barrels of fuel, or 16,785 more than the beginning of test year balance of 763,942 barrels. HECO T-5 Attachment 1 of the Stipulated Settlement Letter, at 8. By using the inventory value of $43,274,000 for the end of test year balance for the purposes of this adjustment, the Company effectively used the lower amount of 763,942 barrels for both the beginning and end of test year balances.

In the present Motion, Hawaiian Electric is not requesting that any biofuel inventory for CIP CT-1 be included in the 2009 test year fuel inventory.

Accumulated Deferred Income Taxes

The Parties agreed to the test year estimate of the accumulated deferred income taxes ("ADIT") associated with CIP CT-1. See Stipulated Settlement Letter Exhibit 1 at 73. The total ADIT associated with CIP CT-1 was calculated to be $4,518,000 and the impact on average rate base was $2,259,000 in the 2009 test year. In accordance with the Interim Decision and Order, Hawaiian Electric excluded this ADIT from rate base in calculating the revenue requirements for purposes of the 2009 initial test year interim rate relief. The exclusion of the ADIT associated

with CIP CT-1 had the effect of decreasing ADIT (increasing rate base). See Hawaiian Electric's July 9, 2009 Additional Schedule Resulting from Interim Decision and Order, Exhibit 3, at 9.1. In calculating the amount of the requested second interim increase, Hawaiian Electric has added back the $2,259,000 of ADIT associated with CIP CT-1 that was excluded in accordance with the Interim Decision and Order (which reduces rate base).

II. CIP CT-1 PROJECT STATUS AND COST

CIP CT-1 Project Status

The Campbell Industrial Park Generating Station and Transmission Addition Project ("CIP CT-1 Project") includes (1) the construction of a new generating facility (including the acquisition of a nominal 100 MW simple-cycle combustion turbine generator and related equipment and auxiliary facilities) (CT-1), (2) an approximately two-mile long 138 kV transmission line ("Transmission Line"), (3) expansion of Hawaiian Electric's existing Barbers Point Tank Farm site , (4) substation upgrades for the AES substation, Campbell Estate Industrial Park ("CEIP") Substation and Kahe Substation ("Substation Upgrades"), and (5) auxiliary equipment and facilities related to the foregoing.

Project components that were already placed in service as of the date of filing Hawaiian Electric's supplemental testimonies (July 20, 2009) included:

- AES Substation (P0001051) – April 9, 2009
- CEIP Substation (P0001052) – April 22, 2009
- CIP Land (P0001084) – November 28, 2008[9]
- Microwave Communications (P0001135) – June 3, 2009
- Kalaeloa Relays (P0001137) – April 1, 2009

The estimated in-service dates for the remaining components were as follows:

- Generating Station (P4900000) – July 31, 2009
- Transmission Line (P0001050) – July 27, 2009

[9] The land and land rights were acquired in 2008, and should be included in rate base from that date, since they do not constitute depreciable property.

- Fiber Communication (P0001134) – July 27, 2009
- Kahe Breakers (P0001136) – August 31, 2009

The combustion turbine-generator was completed and placed in service (i.e., tied into the electrical grid and producing power) on August 3, 2009. The transmission line and fiber communication components were completed as scheduled on July 27, 2009, and the Kahe breakers work was completed on October 1, 2009.

For the generating station component, two subcomponent systems were not completed as of August 3, 2009, including the two blackstart generators and the water treatment system. The blackstart generators (estimated to cost approximately $3,000,000) were completed and placed in service as of October 15, 2009.[10]

Based on standard accounting practices, Hawaiian Electric discontinued the accrual of AFUDC as of the dates components were placed in service.[11]

The water treatment system (estimated to cost approximately $6,500,000) also is expected to be placed in service by December 15, 2009.[12] The later in-service date for this subcomponent does not affect the operation of the generating unit. Until the water treatment system is in service, demineralized water is provided at the CIP CT-1 generating station by trucking in water from one of the nearby independent power producers or from other Hawaiian Electric generating stations.

CIP CT-1 Project Cost

The estimated capital costs of the CIP CT-1 Project for purposes of this rate case are $163,279,651, as shown on HECO-S-1701. A copy of the exhibit is attached hereto as

[10] Declaration of Robert Isler at 1. Hawaiian Electric witness, Robert Isler, also testified to this at the panel concerning CIP CT-1 in this docket. Mr. Isler's Declaration is being filed initially with a facsimile signature of the declarant. Upon receipt of the executed original Declaration of Mr. Isler, Hawaiian Electric's attorneys will file it with the Commission.

[11] Declaration of Robert Isler at 1.

[12] Declaration of Robert Isler at 1.

Attachment 1. Of that amount, however, $1,809,875 represents the cost of the parcel between Hanua Street and the AES Substation that is now included in Property Held for Future Use, and no longer included in the cost of any of the project cost components. HECO-S-1701.

Of the remaining $161,469,776, (1) $6,119,685 represents the cost of land and easements acquired for the project in 2008, which is included in Property Held for Future Use in the beginning of the test year rate base balance amount, and in plant-in-service in the end of test year rate base balance amount, and (2) $155,350,091 represents the costs of the other components.

It should be noted that the total project cost estimate includes $50,000 that was estimated to be expended in 2010, and was not included in the test year rate base estimate. As a result, the test year cost estimate for the project is $161,419,776 (i.e., $163,279,651, less $1,809,875 included in Property Held for Future Use, and less $50,000 estimated to be incurred in 2010).

The total cost estimate for the project has been updated to approximately $193.1 million, as shown in HECO-S-17A01, and as supported in HECO ST-17A.[13] Nonetheless, given the settlement with the other Parties, and the timing of the availability of the updated cost estimate, Hawaiian Electric has not proposed that the cost estimate included in the stipulated settlement be adjusted to reflect the updated current cost estimate supported in its supplemental testimonies.

As of October 31, 2009, the total costs recorded for the components and subcomponents that are included in plant in service include (1) $6,119,685 for the cost of land and easements acquired for the project in 2008, and (2) $164,735,637 for the other components (excluding the water treatment system, for which $4,674,765 had been recorded to CWIP). The amount recorded as of October 31, 2009 of $177,339,962 is over $14,000,000 in excess of the test year

[13] Hawaiian Electric submitted a detailed explanation of the updated costs in testimonies submitted in this proceeding and in the cost report submitted in Docket No. 05-0145. The record (including the testimony provided during the Panel 5 hearing), supports Hawaiian Electric's position that, although the costs for the CIP CT-1 project were substantially underestimated, the actual costs incurred were prudent.

estimate of $163,279,651. See Attachment 2 to this Statement of Facts. The estimated costs to be incurred in the last two months of 2009, and in 2010 for the components that have been closed to plant in service include costs for work related to the plant site (including road paving, lighting, cameras, security and other miscellaneous work), and remaining construction management services. In addition, the costs related to certain of the change orders in the construction contracts are being negotiated. The estimated costs for 2010 reflect costs related to spare parts specific to the project that are not expected to be received until 2010.[14]

Operation and Maintenance Costs for CIP CT-1

Prior to settlement discussions and the ensuing adjustments, $1,474,000 of costs were identified with the Production O&M expenses of CIP CT-1.[15] As part of settlement negotiations and IR response commitments, Hawaiian Electric agreed to reduce its Production O&M expenses by $105,000 related to the removal of waste water treatment chemicals ($49,000), boiler water treatment ($42,000), and demin/evap chemicals ($14,000).[16] Thus, the resulting production O&M costs associated with CT-1 is $1,369,000 as reflected in the Statement of Probable Entitlement ($1,474,000 - $105,000).

[14] Declaration of Robert Isler at 1-2.

[15] The components of the $1,474,000 CIP CT-1 Production O&M expenses are set forth in HECO T-7 Rate Case Update, Attachment 14, at 4, column F. See also HECO T-7 Rate Case Update, Attachment 14, at 3, columns D, E and F; HECO T-7 Rate Case Update, Attachment 14, at 1; and HECO T-7 Rate Case Update, Attachment 14, at 5.

[16] Stipulated Settlement Letter, Exhibit 1, at 29 summarizes the three adjustments agreed to in responses to CA-IR-297 and CA-IR-468.

III. CIP CT-1 BIOFUEL STATUS

Although the CIP CT-1 has been placed in service and is fully capable of serving customer load, Hawaiian Electric is still in the process of obtaining biodiesel supplies for the unit.[17]

Until proper approvals and permits are received to operate CIP CT-1 on biofuels and biofuels are available, the unit will not be operated to serve customer load except pursuant to the Commission's orders or instructions.[18] Once biofuel test burn data is available, Hawaiian Electric will submit a permit modification application to the State of Hawaii, Department of Health ("DOH") using the data to authorize using biodiesel as a fuel, in conformance with the joint stipulation ("Joint Stipulation") submitted as Exhibit A to the Joint Motion For Approval of Stipulation filed by Hawaiian Electric and the Consumer Advocate on December 4, 2006 in Docket No. 05-0145, and accepted by the Commission in its final order. (In parallel, Hawaiian Electric has submitted a permit modification application to the DOH, which among other things, establishes a mechanism allowing more operational flexibility, including addressing scenarios with different biofuel feedstocks, e.g., if market availability or cost considerations were to require switching from one type of biofuel to another on relatively short notice.[19]) Once the

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[17] Declaration of Cecily A. Barnes at 1. Ms. Barnes' Declaration is being filed initially with a facsimile signature of the declarant. Upon receipt of the executed original Declaration of Ms. Barnes, Hawaiian Electric's attorneys will file it with the Commission.

[18] In its Decision and Order filed August 5, 2009 ("August 5, 2009 D&O") in Docket No. 2007-0346, the Commission notes that its order approving the stipulation requires Hawaiian Electric to operate CT-1 using only 100% biofuel, and "reminds HECO that it cannot operate CT-1 using a fuel other than 100% biofuels, absent prior approval of the commission." Id. at 5 n.9, citing Decision and Order No. 23457 at 2.

[19] The proposal is expected to provide a long-term support for biofueling, in that it would allow for a more streamlined method to obtain DOH authorization for use of alternative biofuels in the future. Specifically, under the recently submitted permit modification application, a significant modification would not be necessary each time a different biofuel is used so long as the DOH determines that the biofuel meets requirements that will be established in advance through this modification.

amended air permit is received, the unit will be running on biodiesel, except under limited emergency circumstances in which biodiesel is unavailable. See response to PUC-IR-117 at 4-5.

Use of Biofuel in CIP CT-1

In the CIP CT-1 docket, Docket No. 05-0145, the Consumer Advocate recommended,[20] and Hawaiian Electric agreed, to fuel the new generating unit using 100% biofuel. The Commission agreed that burning biofuel is preferable to fossil fuels and approved its use according to the Joint Stipulation, subject to the Commission's approval of the specific fuel purchase contract for the biofuel.

By Decision and Order No. 23457, filed on May 23, 2007 in Docket No. 05-0145 ("D&O 23457"), the Commission approved Hawaiian Electric and the Consumer Advocate's Joint Motion for Approval of Stipulation, thereby approving Hawaiian Electric's request to commit funds for the purchase and installation of CT-1 and a new 138 kilovolt transmission line. The Commission noted that its "decision [was] based on the undisputed urgent need for new generation by HECO, and the fact that State policy and law support HECO's commitment to use 100% biofuels in the new generating unit." D&O 23457 at 2.

In approving the Joint Stipulation, the Commission stated, "[a]s to HECO's commitment to use 100% biofuels, the commission finds that commitment to be reasonable and consistent with State policy to reduce Hawaii's dependence on imported fossil fuels and encourage sustainability through economic diversification, export expansion, and import substitution." D&O 23457 at 45. The Commission further found that "using biofuels, which may eventually be locally grown and produced, is preferable to burning fossil fuel for the [CT-1] Project, and will

[20] The Consumer Advocate did not object to the commitment of funds for the project, provided the combustion turbine used 100% biofuels. The Consumer Advocate recommended that Hawaiian Electric be required to use ethanol or some other biodiesel fuel, as opposed to naphtha, for the generating unit, and that Hawaiian Electric be required to work with the Department of Business, Economic Development & Tourism to develop a local resource for biofuels. CA-T-1, filed August 17, 2006 in Docket No. 05-0145.

advance the State's policies of reducing the State's dependence on fossil fuels and diversifying the State's economy." D&O 23457 at47-48.

As discussed in Docket No. 05-0145, because biodiesel is a new fuel to be used in CIP CT-1, Hawaiian Electric must obtain a modification of its air permit from the Hawaii Department of Health ("DOH") to operate CIP CT-1 on biodiesel. See Exhibit A to Biofuels Stipulation; see also response to PUC-IR-117 at 6-7; HECO ST-17E at 9; HECO ST-17A at 41.

Hawaiian Electric presented its plan for obtaining the requisite air permit modification from the DOH in Docket No. 05-0145, as described in Exhibit A to the Joint Stipulation):[21]

> Modify the Air Permit to Allow Use of the Chosen Biofuel
>
> 5. Hawaiian Electric will work with the Department of Health ("DoH") to provide a permitting process that will lead to permits to bum biofuels in the CT Unit.
>
> 6. Because the emissions data does not currently exist for biofuels and in order to ensure that ratepayer funds are spent effectively and wisely, Hawaiian Electric will implement the following process:
>
> a. In general, the CT unit will go through acceptance testing using naphtha or low sulfur diesel in order to ensure that the CT Unit meets contract specifications and air permit requirements.
>
> b. Following acceptance of the CT Unit, Hawaiian Electric will request DoH's approval to conduct testing at different loads using the chosen biofuel for which a supply contract has been executed, and to gather the emissions data needed to modify the air permit. After emissions data is collected using samples of the selected biofuel (i.e., biodiesel or ethanol), HECO will seek to modify the air permit to also allow 100% use of that biofuel. This entire process of collecting emissions data and modifying the permit could take up to 6 months depending on DoH requirements.
>
> c. Following the air permit modification, the unit will then be run by burning biofuel (100%).

[21] Exhibit A (Position on Biofuels for the New Combustion Turbine Unit) to Stipulation between Hawaiian Electric and Consumer Advocate, dated December 4, 2006, submitted with Joint Motion for Approval of Stipulation, filed December 4, 2006 in Docket No. 05-0145.

Aggressive Implementation of the Process

7. Hawaiian Electric commits to an aggressive implementation of this process to run the CT Unit on one hundred percent (100%) biofuel, subject to the requirements of the Commission and DoH.

8. If there is an interruption of the biofuel supply or an emergency or operational problem that would affect the use of the CT Unit, Hawaiian Electric will work with the Consumer Advocate and the Commission to attempt to address such contingencies.

Once CIP CT-1 was placed in-service, Hawaiian Electric conducted performance guarantee testing using low sulfur diesel to determine if CIP CT-1 met Siemens' performance guarantees.[22]

There has been a gap between the time that (1) the CIP CT-1 generating unit was placed in service, and the performance guarantee testing under the Siemens contract was subsequently completed, and (2) biodiesel will be available for the conduct of the emissions testing.

There will be another gap in time, which has always been anticipated, between the completion of the biodiesel emissions tests[23] and the modification of the air permit for CIP CT-1 to permit the burning of biodiesel on an on-going basis.[24] See Exhibit A to Joint Stipulation,

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[22] If CIP CT-1 did not meet those guarantees, then Siemens had up to nine months to address those performance issues. If Hawaiian Electric used biodiesel to operate CIP CT-1 prior to Siemens demonstrating achievement of the performance guarantees, then the performance guarantees would have been automatically deemed successfully achieved, regardless of actual performance. Thus, Hawaiian Electric always intended to use biodiesel for emissions testing after the performance guarantees were achieved or remedied under the Siemens contract. See Exhibit A to Biofuels Stipulation; see also testimony and cross-examination of Robert Isler during the supplemental Imperium Contract hearing in Docket No. 2007-0346 on March 10, 2009, Vol. II at 445-460; HECO ST-17A at 39-41; testimony of Joseph Herz during the hearings in this proceeding.

[23] The purpose of the biodiesel testing is to gather emissions data that will be provided to DOH. DOH will review that information and Hawaiian Electric has testified that it anticipates that it will take DOH anywhere from 2 to 6 months to review the request for permit modification. See Exhibit A to Biofuels Stipulation; see also testimony and cross-examination of Robert Isler during the supplemental Imperium Contract hearing in Docket No. 2007-0346 on March 10, 2009, Vol. II at 445-460; HECO ST-17A at 39-41.

[24] It was the understanding of Hawaiian Electric, and appears to have been the understanding of the Consumer Advocate, that CIP CT-1 would be operated on diesel fuel during the gap period after emissions testing was completed, and the air permit was modified. See testimony and cross-examination

which states that the process of collecting emissions data and modifying the air permit could take up to 6 months. See also Response to PUC-IR-117 at 5-7, 11-12; and HECO ST-17E at 9-11.

Depending on the time required for approval of a new contract for the operational supply of biodiesel, and initial deliveries of biodiesel under the new contract, there could be a further gap in time between the modification of the air permit and the availability of biodiesel for full time operation of the unit.

Hawaiian Electric's initial efforts to secure an operational supply of biofuel were unsatisfactory to the Commission, as it clearly indicated in rejecting the amended Imperium Contract.

Hawaiian Electric cannot redo the Imperium contract or amendment now. But it has endeavored to address the need for a new RFP process and to acquire the emissions test fuel as rapidly as possible. See response to PUC-IR-117 at 8-11, 12-13, and Declaration of Cecily Barnes dated November 19, 2009 attached hereto.

Acquisition of Biofuel for CIP CT-1

On December 27, 2006, Hawaiian Electric issued a New Capacity Biofuel Supply Request for Proposals ("Original RFP"). Hawaiian Electric received seven proposals in response to its RFP. Hawaiian Electric hired Black and Veatch Corporation ("Black and Veatch") to evaluate and provide guidance on the proposals. Based on Black and Veatch's recommendations, Hawaiian Electric entered into negotiations with Imperium Services, LLC ("Imperium"), which

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of Robert Isler during the supplemental Impeium Contract hearing in Docket No. 2007-0346 on March 10, 2009, Vol. II at 445-460; HECO ST-17A at 41 (R. Isler); testimony of Joseph Herz during the hearings in this proceeding.

Given the Commission's understanding, as expressed in the Imperium D&O, that the unit will be operated only on biodiesel, except for testing and emergency use, the use of CIP CT-1 will be limited to those purposes pending the availability of an operational supply of biodiesel.

resulted in a contract between Hawaiian Electric and Imperium for a biodiesel fuel supply for CT-1 ("Original Contract").

On October 18, 2007, Hawaiian Electric filed its Application in Docket No. 2007-0346 seeking Commission approval of the Original Contract.

On January 30, 2009, Hawaiian Electric filed Amendment No. 1 to Biodiesel Supply Contract Between Hawaiian Electric Company, Inc. and Imperium Services, LLC and Assignment to Imperium Grays Harbor, LLC. ("Amendment"). On February 6, 2009, Hawaiian Electric filed the Biodiesel Terminalling and Trucking Agreement ("TTA") with Aloha Petroleum, Ltd. (the Amendment and the TTA collectively referred to as "Amended Contract").

By Decision and Order issued August 5, 2009 ("Imperium D&O"), in Docket No. 2007-0346, the Commission rejected the Imperium biofuels contract, as amended. The Commission noted, "in general, that the terms of the Amended Contract are substantially less favorable to HECO (and therefore its ratepayers) in price, risk, scope, and additional costs than the Original Contract due to the new point of delivery of fuel." Id. at 16.

In response to the Commission's decision, Hawaiian Electric has expeditiously reissued requests for proposals for biodiesel.

Test Supply of Biodiesel

To acquire the biodiesel for the biodiesel emissions data project, Hawaiian Electric issued a Request for Proposal Biodiesel Supply Contract ("RFP") on August 14, 2009. Eight proposals were received by Hawaiian Electric in response to the RFP.

After its evaluation of the proposals, Hawaiian Electric entered into comprehensive negotiations with the successful bidder, REG Marketing and Logistics, LLC ("REG"). On October 1, 2009, Hawaiian Electric executed a contract with REG ("Biodiesel Supply Contract").

The Biodiesel Supply Contract is for approximately 400,000 gallons, the amount of biodiesel estimated by Hawaiian Electric required to conduct testing for the biodiesel emissions data project. On November 6, 2009, REG began delivering the biodiesel using 5,800 gallon (minimum) intermodal containers manufactured to International Organization for Standardization ("ISO") specifications, known as "ISO containers," on suitable container chassis to Hawaiian Electric's CIP Facility. Fuel is directly discharged from the ISO containers into one of the two fuel storage tanks at the CIP Facility. The delivery of all 400,000 gallons is anticipated to be completed by November 20, 2009.[25]

Thirty-five ISO containers of biodiesel containing an aggregate of approximately 200,000 gallons of biodiesel have been delivered to Hawaiian Electric's CIP Facility as of November 13, 2009 as shown in Table 1. The remaining thirty-five ISO containers are scheduled to be delivered to CIP throughout the week of November 16, 2009 at the rate of approximately seven ISO containers per day.[26]

Table 1. Deliveries received at CIP through 11/13/09

Date:	11/6/09	11/09/09	11/10/09	11/11/09	11/12/09	11/13/09	Total to-date
No. of Containers	1	8	7	4	7	8	35

The Biodiesel Supply Contract requires that the feedstock used to produce the biodiesel supplied to Hawaiian Electric be exclusively derived from yellow grease (recycled cooking oil) and/or animal waste fat products. Hawaiian Electric has a joint understanding with the National Resources Defense Council ("NRDC") that yellow grease and animal fat waste products as a source of biodiesel feedstock are not covered by the HECO-NRDC Environmental Policy for

[25] Declaration of Cecily A. Barnes at 1.
[26] Declaration of Cecily A. Barnes at 1-2.

Sustainable Procurement of Biodiesel for agriculturally grown feedstocks. It is NRDC's view however that yellow grease and animal fat waste products feedstocks generally represent a positive environmental approach for the manufacture of biodiesel as they are both waste products from existing commercial or industrial operations.

Hawaiian Electric will conduct the biodiesel emissions data project beginning the week of November 30, 2009 in order to begin biodiesel operations in 2010.[27]

On October 2, 2009, Hawaiian Electric filed an application in Docket No. 2009-0296 requesting Commission approval of a one-time purchase of a supply of approximately 400,000 net U.S. gallons of biodiesel through the Biodiesel Supply Contract, and approval for the inclusion of the costs of the Biodiesel Supply Contract, including without limitation, the costs associated with the biodiesel, transportation, and related taxes, in Hawaiian Electric's Energy Cost Adjustment Clause ("ECAC") to the extent that the costs are not recovered in Applicant's base rates.

In addition, while Hawaiian Electric is willing to use 100% biodiesel in CIP CT-1, Hawaiian Electric also requested that the Commission allow Hawaiian Electric to use B99 biodiesel blended with no more than 1% petroleum diesel (in addition to 100% biodiesel) in order to benefit from the Federal biofuel blenders' tax credit, currently $1.00 for each gallon of biodiesel mixture. The Biodiesel Supply Contract factors in the Federal biofuel blenders' tax credit in a manner that, in effect, will pass the credit on to Hawaiian Electric's customers.

Based on the Biodiesel Supply Contract's current delivery of biodiesel, Hawaiian Electric stated in the Application in Docket No. 2009-0296 that Hawaiian Electric may commit to the Biodiesel Supply Contract and burn biodiesel prior to Commission approval for the purposes of conducting the biodiesel emissions data project. Hawaiian Electric acknowledges

[27] Declaration of Cecily A. Barnes at 2.

that incurring the costs prior to Commission approval has some risks but given the need to facilitate biodiesel testing of CIP CT-1, Hawaiian Electric has respectfully requested that, if the Commission approves the Biodiesel Supply Contract, the Commission allow all costs incurred to date for the biodiesel contract, to the extent that such costs are not recovered in Hawaiian Electric's base rates, to be deferred and allow such costs to be recovered through the ECAC, pursuant to Section 6-60-6 of the Hawaii Administrative Rules. On October 6, 2009, Hawaiian Electric placed the order with REG for the biodiesel under the Biodiesel Supply Contract. On October 22, 2009, Hawaiian Electric filed a letter informing the Commission of the October 6, 2009 order placed with REG for 400,000 gallons of biodiesel under the terms of the biodiesel supply contract, and provided a copy of the letter of agreement signed by Hawaiian Electric and REG to effect the order date of October 6, 2009.

Testing on CIP CT-1, beginning the week of November 30, 2009, is estimated to take up to one month.

1. Biodiesel emissions tuning: (Approximately one week)

   Operate CIP CT-1 from start-up to base load with water injection. This process is needed to: (1) determine the optimum water to fuel ratio to maintain emissions within the air permit limits while burning biodiesel, (2) ensure that this water to fuel ratio will not cause any undue wear and tear on the unit, and (3) record operational parameters. In the event that the test is halted due to operational issues, the test must be restarted until the test is completed in a continuous time period.

2. Biodiesel Test Burn: (Approximately one week)

   Operate CIP CT-1 from start-up to base load with water injection in order to conduct stack emissions testing at minimum, 50%, 75% and 90-100% of peak load.

3. Biodiesel Operational Testing: (Approximately one week)

   Operate CIP CT-1 with the finalized operation parameters to test the reliability of the unit on biodiesel.

Operational Supply of Biodiesel

In anticipation of the need for biodiesel to operate CIP CT-1 on an on-going basis, Hawaiian Electric also issued its RFP for a two-year supply on August 14, 2009. The RFP requests proposals for the supply and delivery of three million to seven million gallons of biodiesel per year for a term of two years from the contract effective date as subject to Commission approval. Eight proposals were received by Hawaiian Electric in response to the RFP for a two year supply of biodiesel.

Hawaiian Electric began evaluating proposals submitted in response to the RFP that were received by the RFP deadline of September 30, 2009. Hawaiian Electric is reaching conclusion of its evaluation of the proposals and is in the process of final negotiations with a selected supplier. The final biodiesel supply contract award for the two year operational supply of biodiesel is expected to be completed by the week of November 30, 2009. Subsequently, Hawaiian Electric is targeting to submit a proposed contract to the Commission in early December, 2009. The ordering of the biodiesel according to the terms of the biodiesel supply contract is expected to commence upon a Commission decision approving the contract. The estimated lead time of the first biodiesel delivery under the planned biodiesel supply contract is 20 weeks from time of order placement.[28]

The criteria, evaluation, and methodology used in reviewing and evaluating the proposals to select a supplier were similar to those established in the Biodiesel Supply Contract for the 400,000 gallon test volume selection process. Because the test volume is a one-time purchase of a relatively small volume of biodiesel, there is less risk in the Biodiesel Supply Contract for test volume than the risk that will be inherent in assuring a secure biodiesel supply for operational volume requirements. Therefore, evaluation of the two year biodiesel proposals will be more

[28] Declaration of Cecily A. Barnes at 2.

comprehensive than that of the test volume proposals. From this evaluation, Hawaiian Electric has entered into comprehensive negotiations with the highest scoring bidder with the goal of completing a biodiesel supply contract for the two year operational biodiesel supply by the week of November 30, 2009.

Biodiesel Summary

Hawaiian Electric understands the Commission's concern, in the wake of the rejection of the Imperium contract, that the Company was not in a position to comply with a key element of the approval of CT-1 – a viable supply of biofuels.

Hawaiian Electric believes that the foregoing demonstrates that supplies of biofuels are available and that the appropriate commitments to obtain them have been met. The Company took to heart the lessons learned in the Imperium case and the current biofuels arrangements can be regarded as real and as viable. Furthermore, by taking the risk of purchasing the initial supply without Commission approval, the Company is fully demonstrating its commitment to meeting the conditions of the order authorizing CT-1. Stated otherwise, to the extent that the Commission was saying that a "used and useful CT-1" needed to be a "used and useful biofueled CT-1," the Company is making clear its compliance with the full condition that went with the approval of CT-1.

IV. EMERGENCY USE OF CIP CT-1

Since July 31, 2009, Hawaiian Electric has periodically dispatched the CIP CT-1 unit to perform various tests and commissioning activities that require the unit to be tied to the electric utility grid and run at various loads. The response to PUC-IR-154 (filed October 19, 2009) listed the dates and times the CIP CT-1 unit was dispatched for testing purposes and a brief description of the testing or commissioning activities that were performed. When CIP CT-1 was run for

testing and commissioning activities, although it was not the purpose of the run, the unit did provide electricity to the HECO grid.

Until biodiesel is available, however, the CIP CT-1 unit will be held from use for purposes other than testing unless an emergency condition arises, namely, a situation in which CIP CT-1 would be used as a last resort generation resource to mitigate spinning reserve and generation capacity shortfall situations that have a high potential to lead to or have already led to load shedding and island wide blackouts. Moreover, in accordance with the Joint Stipulation, if there is a need to operate the unit in the absence of a biofuel supply in an emergency situation, "Hawaiian Electric will work with the Consumer Advocate and the Commission to attempt to address such contingencies." Response to PUC-IR-117 at 13-14.[29]

Given the current situation, Hawaiian Electric submitted a proposal to the Commission and the Consumer Advocate by letter dated September 16, 2009, in order to identify the limited, emergency circumstances under which CIP CT-1 would be operated at this time (for the purpose of serving load). The proposal was developed in recognition that natural disasters and other catastrophic events could impact the Company's electric system at any time, and that preparation and planning for emergencies are necessary to fulfill its commitment to provide reliable service to its customers. Response to PUC-IR-117 at 13-14; HECO Hearing Exhibit No. 4.

In particular, Hawaiian Electric proposed to call on CIP CT-1 as a last resort generation resource to mitigate spinning reserve and generation capacity shortfall situations that have a high potential to lead to or have already led to load shedding and island wide blackouts. The CIP CT-1 unit is particularly effective under these circumstances, given its black-start capability,

[29] This description of emergency conditions was proposed by Hawaiian Electric in a letter to the Commission and the Consumer Advocate dated September 16, 2009. See HECO Hearing Exhibit 4 at 2. That letter contains a detailed explanation of Hawaiian Electric's Generation Conditions, i.e., the amount of excess or shortfall of spinning reserves available at any given time, and the Generation Conditions in which CIP CT-1 would be called upon for emergency use.

which (1) provides an additional resource to address an island-wide blackout situation, and (2) has a faster start-up feature which can then be used to more quickly restart the other units on the system. Response to PUC-IR-117 at 14-15; HECO Hearing Exhibit No. 4.

Based on its review, the Consumer Advocate notified the Commission and Hawaiian Electric by letter dated September 30, 2009 that it does not object to Hawaiian Electric's request to utilize CIP CT-1 on a limited basis under the emergency conditions, provided that the Commission and the Consumer Advocate are notified of such use during Gen Con 1, 2, 3, or 4.[30] Response to PUC-IR-117 at 14; HECO Hearing Exhibit No. 5 at 2.

In its letter, the Consumer Advocate noted that:

> The Consumer Advocate notes that forecasting is not an exact science and actual loads may exceed forecast values such that reserve capacity shortfalls may be experienced even in the years 2010 and 2011. In fact, the Consumer Advocate notes that the recorded peak load as of 2009 to-date for HECO's system was 1,220 MW (higher than the May 2009 S&P for the years 2009 through 2013), which would result in a much higher reserve capacity shortfall for even the year 2009.
>
> As such, the Consumer Advocate believes that allowing the Company to utilize CIP CT-1 under the emergency conditions set forth in the September 16, 2009 letter will provide the Company with sufficient generation capacity on its system to mitigate concerns where: (1) spinning reserve is anticipated to be limited; and (2) there are immediate concerns with spinning reserve shortfall or insufficient generation to meet load requirements. As outlined in Docket No. 05-0145, CIP CT-1 is a unit, especially with its black start capabilities, that will be instrumental in addressing the possibilities of generation capacity shortfalls and/or the possibilities of an outage. Thus, with the understanding that HECO will utilize a notification procedure where it notifies the appropriate personnel from the Commission and Consumer Advocate, rather than seek approval in certain circumstances, the Consumer Advocate does not object to the Commission granting the requested authority.[31]

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[30] Hawaiian Electric uses Generation Condition ("Gen Con") levels to characterize the amount of excess or shortfall of spinning reserves available at any given time. Use of these levels to describe the state of the system helps to facilitate contingency planning efforts in the event of spinning reserve or generation capacity shortfalls. The table in Attachment 1 to this IR response defines each Gen Con level and describes the general state of the system at those levels.

[31] Response to PUC-IR-117 at 14-15; HECO Hearing Exhibit No. 5 at 3 (footnotes omitted).

Hawaiian Electric has been informed by the Commission that case-by-case approvals for emergency use of the CT-1 are not required. However, the Company is required to submit written notification to the Commission and the Consumer Advocate within 3 days after CT-1 is used for the emergency purposes described in the previous paragraphs; i.e., when the system is in Gen Con 1, 2, 3 or 4 situations. Response to PUC-IR-117 at 15.

The response to PUC-IR-154 lists the date (October 9, 2009) and time when the CIP CT-1 unit was dispatched for emergency purposes and contains a brief description of the system condition that prompted its dispatch. A more detailed explanation was provided in Hawaiian Electric's letter to the Commission dated October 12, 2009, which has been filed in this proceeding as HECO Hearing Exhibit No. 6.

V. NEED FOR CIP CT-1

Hawaiian Electric presented its testimonies on the need for CIP CT-1 in Docket No. 05-0145 on April 18, 2006 and September 28, 2006.[32] Those testimonies demonstrated that additional firm capacity was already needed at that time to address the reserve capacity shortfall situation identified in its annual Adequacy of Supply ("AOS") report filed March 31, 2004. However, because of the long lead times that it takes to permit and install new generation, Hawaiian Electric anticipated that the soonest the project could be placed into service was July 2009.[33]

The Commission approved the commitment of expenditures for the CIP CT-1 Projects in Decision and Order No. 23457 ("D&O 23457"), issued May 23, 2007. In D&O 23457 the Commission explicitly recognized the "dire need" for the project:

> Pursuant to G.O. No. 7, and after careful consideration and review of the entire record in this proceeding, the commission finds that the Project, as set forth in

[32] Hawaiian Electric filed its application for approval of the CIP CT-1 Project on June 17, 2005.
[33] HECO ST-4 at 2.

> HECO's and the Consumer Advocate's Joint Stipulation, is reasonable and in the public interest. The commission first recognizes the dire need for additional generation due to the reserve capacity shortfall faced by HECO in recent years. In fact, as stated above, all Parties agree that additional generation is needed on HECO's system. The commission also finds that the need is immediate, and that the Project must be installed by July 2009 or as early as possible, as requested by HECO.

D&O 23457 at 42-43 (emphasis added).

In the AOS reports filed since the issuance of D&O 23457, Hawaiian Electric has provided updated information concerning the reserve capacity shortfall.[34] In Hawaiian Electric's 2008 AOS report, filed on January 30, 2008, Hawaiian Electric indicated that: "After the planned mid-2009 addition of the CIP generating unit, and in recognition of the uncertainty underlying key forecasts, HECO anticipates the potential for continued reserve capacity shortfalls in the range of 20 MW to 80 MW in 2010, up to a range of 70 MW to 130 MW in 2014." In Hawaiian Electric's 2009 AOS report, filed on February 27, 2009, Hawaiian Electric indicated that: "The scenario analysis indicates that in 2010, HECO may experience anywhere from a 10 MW reserve capacity shortfall under the higher load scenario to a 50 MW reserve capacity surplus in the reference scenario. By 2014, HECO may experience anywhere from a 40 MW reserve capacity shortfall under the higher load scenario to a 20 MW reserve capacity surplus in the reference scenario." HECO ST-4 at 5-6.

In Hawaiian Electric's 2009 Adequacy of Supply ("AOS") report, submitted to the Commission on February 27, 2009, Hawaiian Electric provided an assessment of its reserve

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[34] "Reserve capacity shortfall" is defined as the amount of additional firm generating capacity or equivalent reductions in load from load management and energy efficiency demand-side management ("DSM") programs installations needed to restore the generating system reliability above Hawaiian Electric's reliability guideline. A reserve capacity shortfall exists when Hawaiian Electric does not have as much firm generation as called for by its capacity planning considerations to meet the highest demand of its customers. If Hawaiian Electric is in a reserve capacity shortfall situation and a unit must be taken out of service for emergency maintenance, or a unit is unexpectedly forced out of service, or actual demand exceeds the forecasted demand, then Hawaiian Electric may not be able to provide electric service to some of its customers. HECO ST-4 at 2-3.

capacity situation under the September 2008 peak demand forecast and with CIP CT-1 in service in Table 8 on page 27 of the report:[35]

Table 8: Reserve Capacity Shortfall for Reference and Planning Scenarios (MW)

Year	Reference Scenario	Alternate Scenarios		
		Two-Month 90 MW Outage	Higher Load (Add 60 MW)	10 yrs/day reliability scenario
2009	-30	-60	-90	-70
2010	50	30	-10	20
2011	30	10	-30	0
2012	10	0	-50	-20
2013	30	0	-30	-10
2014	20	0	-40	-10

(Note: Negative values indicate a shortfall; positive values indicate a surplus)

Under the reference scenario, no reserve capacity shortfalls were projected with CIP CT-1 in service. Under the Higher Load (Add 60 MW) scenario with CIP CT-1 in service, it was projected that a reserve capacity shortfall of 10 MW would be experienced in 2010, with the shortfall increasing to 40 MW in 2014.[36]

For reference, the September 2008 peak demand forecast was as follows:[37]

Year	Net System Peak, MW
2009	1,246
2010	1,243
2011	1,252
2012	1,264
2013	1,296
2014	1,319

[35] HECO ST-4 at 9; Attachment 2 at 1.
[36] Attachment 2 at 1.
[37] HECO ST-4 at 9; Attachment 2 at 1.

In its letter, dated May 6, 2009, to the Commission providing an update to the cost estimate for the Campbell Industrial Park Generating Station and Transmission Addition in Docket No. 05-0145, Hawaiian Electric included Exhibit 2 on the continued need for Campbell Industrial Park Generating Unit CT-1. Table 8A on page 2 in Exhibit 2 provided the results of an analysis of Hawaiian Electric's reserve capacity situation under the September 2008 peak demand forecast if CIP CT-1 were not available. Table 8A is reproduced here:[38]

Table 8A: Reserve Capacity Shortfall for Reference and Planning Scenarios (MW) Without CIP CT-1

Reserve Capacity for Reference and Sensitivity Scenarios, MW

		Alternate Scenarios		
Year	Reference Scenario	Two-Month 90 MW Outage	Higher Load (Add 60 MW)	10 yrs/day reliability scenario
2009	-60	-80	-120	-90
2010	-40	-70	-100	-80
2011	-60	-90	-120	-100
2012	-80	-90	-140	-110
2013	-70	-100	-130	-100
2014	-70	-90	-130	-110

(Note: Negative values indicate a shortfall; positive values indicate a surplus)

The analysis indicated that the reserve capacity shortfalls would increase significantly under all scenarios if CIP CT-1 is not available. For example, under the Reference Scenario, the reserve capacity shortfall would be 40 MW in 2010 and would be as high as 80 MW in 2012.[39]

In the instant docket, in HECO ST-4, it was indicated that a new, May 2009, peak demand forecast was available. A comparison of the forecasts is provided below:[40]

[38] HECO ST-4 at 9-10; Attachment 2 at 1-2.
[39] HECO ST-4 at 9; Attachment 2 at 2.
[40] HECO ST-4 at 10; Attachment 2 at 2.

Comparison of May 2009 and September 2008 Peak Demand Forecasts
With Future DSM but Without Load Management and Rider I
Standby Loads Must be Served by Hawaiian Electric

Year	Net System Peak (MW)		
	September 2008 Forecast	May 2009 Forecast	Difference (May 2009 - September 2008)
2009	1,246		
2010	1,243	1,165	-78
2011	1,252	1,176	-76
2012	1,264	1,208	-56
2013	1,296	1,219	-77
2014	1,319	1,243	-76

Based on the substantially lower May 2009 peak demand forecast, Hawaiian Electric re-evaluated its reserve capacity situation. The results were provided in the table on page 11 of HECO ST-4 and are reproduced here:[41]

Reserve Capacity Shortfall for Reference and Planning Scenarios (MW) Without CIP CT-1,
With May 2009 Sales and Peak Forecast

Year	Reference Scenario	Higher Load (Add 60 MW)
2009	-10	-70
2010	20	-40
2011	10	-50
2012	-30	-90
2013	-10	-70
2014	-10	-70

Because the May 2009 peak demand forecast was substantially lower than the September 2008 forecast, the reserve capacity shortfalls were significantly reduced or eliminated without CIP CT-1 in the Reference Scenario. Shortfalls would still exist under the Higher Load scenario.[42]

[41] Attachment 2 at 3.
[42] Attachment 2 at 3.

More recent evidence provided in the current proceeding establishes that there is still a need for the additional firm capacity provided by CIP CT-1. See Attachment 2 to response to CA-IR-117 (filed October 6, 2009) ("Attachment 2"), attached hereto.[43]

In September 2009, Hawaiian Electric compared the September 2008 and May 2009 peak demand forecasts by month with actually recorded peaks by month, adjusted for standby loads.[44]

Month	Recorded Net Peak (a)	Standby Load (b)	Chevron Demand @ peak .(c)	Tesoro Demand @ peak (d)	Recorded Peak w/ standby load adjustment (e) = (a)+(b)-(c)-(d)	May 2009 Peak Forecast (f)	Difference with Recorded (w/ standby) (g)= (e) - (f)	Sept 2008 Peak Forecast (h)	Difference with Recorded (w/ standby) (i)= (e) - (h)
Jan 2009	1,114	25	0	18.5	1,121	1,097	24	1,139	-19
Feb 2009	1,084	25	0	0.6	1,108	1,085	23	1,143	-35
Mar 2009	1,035	25	0	0.2	1,060	1,089	-29	1,129	-70
Apr 2009	1,040	25	0	0	1,065	1,091	-26	1,141	-76
May 2009	1,138	25	0.4	4.7	1,158	1,106	52	1,164	-6
Jun 2009	1,164	25	0	0	1,189	1,122	67	1,166	24
Jul 2009	1,181	25	0	0.4	1,206	1,159	47	1,202	4
Aug 2009	1,197	25	2.2	0	1,220	1,173	47	1,239	-20

Notes

(a) Recorded monthly net peak.
(b) Estimated Standby Load based on May 2009 S&P Forecast.
(c) Estimated Chevron demand at the time of monthly peak (MVWeb).
(d) Estimated Tesoro demand at the time of monthly peak (MVWeb).
(e) Recorded monthly net peak with adjustments for standby loads (Tesoro, Chevron, Pearl Harbor). This represents the peak that Hawaiian Electric would have had to have served if the cogenerating units at Tesoro, Chevron and Pearl Harbor were not operating. This places the values on an equivalent basis for comparison to the forecast, which assumes Hawaiian Electric needs to serve the Tesoro, Chevron and Pearl Harbor loads.
(f) May 2009 S&P forecast.
(g) Difference between recorded and May 2009 forecast.
(h) Sept 2008 S&P forecast.
(i) Difference between recorded and Sept 2008 forecast.

[43] Mr. Sakuda's Declaration is being filed initially with a facsimile signature of the declarant. Upon receipt of the executed original Declaration of Mr. Sakuda, Hawaiian Electric's attorneys will file it with the Commission.
[44] Attachment 2 at 3-4.

It can be seen from the table that in recent months (June, July and August 2009), the recorded peaks (adjusted for standby loads) have significantly exceeded the monthly peak demand forecast from May 2009. In fact, in June and July 2009, the recorded peaks even exceeded the monthly peak demand forecast from September 2008, which was a higher forecast than the May 2009 forecast.[45]

Therefore, in the near term at least, it appears that the September 2008 peak demand forecast is closer to the recorded peaks. Given this, the reserve capacity shortfalls given in Table 8A above would be representative of the current situation.[46]

Peak Demand Forecasting Uncertainty

Peak demand for electricity is dependent on many factors, including but not limited to, macro and micro economic conditions; weather conditions including temperature, humidity, and rainfall over short periods of time; the delivered price of electricity; the levels of energy savings and conservation achieved through various demand-side measures; and the performance of customer-sited generation at any given time. In fact, peak demand for electricity, by definition is an atypical event driven by non-average or anomalous conditions for these and other factors. Nonetheless, assumptions for these factors are made as part of the process of forecasting peak demand, and the actual results for these aforementioned factors can have a tremendous impact on actual peak demand. Consequently, actual peak demand for electricity may be lower or higher than forecasts of peaks.[47]

As of August 2009, the actual recorded monthly peak in 2009, adjusted for standby loads, was 1,220 MW which is higher than the forecasted peak demand for all five years of the May

[45] Attachment 2 at 4.
[46] Attachment 2 at 4.
[47] Attachment 2 at 4.

2009 peak forecast, 2009 through 2013, by as little as 1 MW in 2013 and as much as 55 MW in 2010.[48]

On October 7, 2009, the recorded gross system peak for Hawaiian Electric reached 1,260 MW (1,213 MW-net). At the time of the peak, Chevron and Tesoro were serving their own internal loads with their cogenerating units. Had these cogenerating units not been operating, the adjusted gross system peak would have been approximately 1,284 MW (1,237 MW-net). The net peak forecast for October was 1,183 MW-net from the May 2009 forecast and 1,246 MW-net from the September 2008 forecast. The adjusted peak of 1,237 MW-net was 54 MW higher than the May 2009 forecast and 9 MW lower than the September 2008 forecast. This is summarized in the table below. See Declaration of Ross H. Sakuda, attached hereto

Month	Recorded Net Peak (a)	Standby Load (b)	Chevron Demand @ peak (c)	Tesoro Demand @ peak (d)	Recorded Peak w/ standby load adjustment (e) = (a)+(b)-(c)-(d)	May 2009 Net Peak Forecast (f)	Difference with Recorded (w/ standby) (g)= (e) - (f)	Sept 2008 Net Peak Forecast (h)	Difference with Recorded (w/ standby) (i)= (e) - (h)
Oct 2009	1,213	25	0.7	0	1,237	1,183	54	1,246	-8

Therefore, the September 2008 forecast continued to be closer to the recorded peak than the May 2009 forecast.

As stated in HECO's response to PUC-IR-117[49], Hawaiian Electric submitted a proposal to the Commission and the Consumer Advocate by letter dated September 16, 2009[50], in order to identify the limited, emergency circumstances under which CIP CT-1 would be operated at this time (for the purpose of serving load). The proposal was developed in recognition that natural disasters and other catastrophic events could impact the Company's electric system at any time,

[48] Attachment 2 at 4.
[49] Page 4 of response.
[50] A copy of this letter was submitted as Hearing Exhibit 4 in the panel hearing.

and that preparation and planning for emergencies are necessary to fulfill its commitment to provide reliable service to its customers.

In particular, Hawaiian Electric proposed to call on CIP CT-1 as a last resort generation resource to mitigate spinning reserve and generation capacity shortfall situations that have a high potential to lead to or have already led to load shedding and island wide blackouts. The CIP CT-1 unit is particularly effective under these circumstances, given its black-start capability, which (1) provides an additional resource to address an island-wide blackout situation, and (2) has a faster start-up feature which can then be used to more quickly restart the other units on the system.

Based on its review, the Consumer Advocate notified the Commission and Hawaiian Electric by letter dated September 30, 2009[51] that it does not object to Hawaiian Electric's request to utilize CIP CT-1 on a limited basis under the emergency conditions, provided that the Commission and the Consumer Advocate are notified of such use during Gen Con 1, 2, 3, or 4.[52]

In its letter, the Consumer Advocate noted that:

> The Consumer Advocate notes that forecasting is not an exact science and actual loads may exceed forecast values such that reserve capacity shortfalls may be experienced even in the years 2010 and 2011. In fact, the Consumer Advocate notes that the recorded peak load as of 2009 to-date for HECO's system was 1,220 MW (higher than the May 2009 S&P for the years 2009 through 2013), which would result in a much higher reserve capacity shortfall for even the year 2009.
>
> As such, the Consumer Advocate believes that allowing the Company to utilize CIP CT-1 under the emergency conditions set forth in the September 16, 2009 letter will provide the Company with sufficient generation capacity on its system to mitigate concerns where: (1) spinning reserve is anticipated to be

[51] A copy of this letter was submitted as Hearing Exhibit 5 in the panel hearing.

[52] Hawaiian Electric uses Generation Condition ("Gen Con") levels to characterize the amount of excess or shortfall of spinning reserves available at any given time. Use of these levels to describe the state of the system helps to facilitate contingency planning efforts in the event of spinning reserve or generation capacity shortfalls. The table in Attachment 1 to of HECO's response to PUC-IR-117 defines each Gen Con level and describes the general state of the system at those levels.

> limited; and (2) there are immediate concerns with spinning reserve shortfall or insufficient generation to meet load requirements. As outlined in Docket No. 05-0145, CIP CT-1 is a unit, especially with its black start capabilities, that will be instrumental in addressing the possibilities of generation capacity shortfalls and/or the possibilities of an outage. Thus, with the understanding that HECO will utilize a notification procedure where it notifies the appropriate personnel from the Commission and Consumer Advocate, rather than seek approval in certain circumstances, the Consumer Advocate does not object to the Commission granting the requested authority.[53]

Hawaiian Electric has been informed by the Commission that case-by-case approvals for emergency use of the CT-1 are not required. However, the Company is required to submit written notification to the Commission and the Consumer Advocate within 3 days after CT-1 is used for the emergency purposes described in the previous paragraphs; i.e., when the system is in Gen Con 1, 2, 3 or 4 situations.

On October 9, 2009, with Kahe Unit 1 on scheduled maintenance, H-Power available for one-half of its normal capability due to scheduled maintenance on one of its boilers, and Kahe Unit 6 out of service on an unplanned outage to repair a steam leak, Waiau Unit 10 was forced out of service due to the initiation of the unit's CO_2 fire suppression system. With these units unavailable, Hawaiian Electric was in Gen Con 1 condition, which meant that it had a shortfall of spinning reserve of up to 40 MW (i.e., the spinning reserve level was between 140 MW and 180 MW) without CIP CT-1 operating. Based on this and other circumstances at the time, including the threat of heavy rains with the possibility of lightning occurring and because the system load was expected to continue to be high over the evening peak, the decision was made to start CIP CT-1 for this Gen Con 1 condition.

On October 12, 2009, Hawaiian Electric filed a letter informing the Commission and the Consumer Advocate that CIP CT-1 was used for emergency purposes. The letter was submitted pursuant to the requirement for Hawaiian Electric to submit written notification to the

[53] Footnotes omitted.

Commission and Consumer Advocate within three days after CIP CT-1 is used for emergency purposes.[54]

New development or the absence of new projects taken into account in a forecast also adds to the uncertainty of the system peak. A few major projects are still expected to come online over the next few years such as the Disney Resort at Ko Olina and Trump Tower in Waikiki. The military has funding approvals for several major projects and in late 2013, the first leg of the Honolulu mass transit project is expected to be operational with substantial new load. Uncertainties on the actual loads for these projects and their actual schedules for their development add additional uncertainty to the peak demand forecast.[55]

Hawaiian Electric recognizes that there are many factors that contribute to actual loads being higher or lower than its forecast and therefore, it must evaluate the potential impact of all the uncertainties the forecasted demand would have on the need for capacity. In order to so, alternative scenarios are examined as described above.

Impact of Reserve Margin Shortfalls

The consequence of having insufficient reserve capacity on the system is that there is a greater likelihood that Hawaiian Electric's customers may experience service interruptions due to the unexpected outage of one or more generating units. It is important to note that while Hawaiian Electric has the ability to delay the execution of a resource plan when circumstances -- such as an economic slump resulting in reduced load growth -- lead to a reduction in urgency, it has very limited ability to accelerate resource plans if unanticipated changes in key drivers demand that firm capacity is needed sooner than anticipated. Furthermore, the commitment to move to renewable energy in compliance with state policy, the growing uncertainty of what the

[54] A copy of this letter was submitted as Hearing Exhibit No. 6 in the panel hearing.
[55] Attachment 2 at 4.

future holds, coupled with the increasing time required by engineering, technical, operational, and environmental processes to add firm generation capacity, all drive the need to take action now to pursue new firm capacity additions if Hawaiian Electric is to be in a position to meet the challenges of integrating intermittent renewable resources on its system and taking traditional fossil-fueled units off the system. HECO ST-4 at 12-13.

Hawaiian Electric Company, Inc.
Campbell Industrial Park Generating Station
and Transmission Additions
Plant Additions

Project No.	Description	2008	2009	2010	Total
P0001052	CIP1 CEIP Substation Mod*		3,890		3,890
P0001135	CIP1 Unit Addition-Microwave*				-
P0001340	CIP1 Unit Addition-Easements	4,857,924			4,857,924
P0001585	CIP1 - Land - Gen Station	1,261,761			1,261,761
P0001050	CIP1 AES-CEIP#2 Trans. Line		5,790,887		5,790,887
P0001051	CIP1 AES Substation Add		3,153,110		3,153,110
P0001134	CIP1 Unit Addition-Fiber		531,769		531,769
P0001136	CIP1 Unit Addition-Kahe Bkrs		1,720,778		1,720,778
P0001137	CIP1 Unit Addition-Kalaeloa		289,912		289,912
P4900000	CIP1 Unit 1 Addition		143,809,745	50,000	143,859,745
	Plant Additions	6,119,685	155,300,091	50,000	161,469,776
P0001084	Parcel between Hanua Street and AES Substation (TMK 9-1-26:38) included in Property Held for Future Use				1,809,875
	Total Project Cost				163,279,651

* In Service dates for the projects P0001052 and P0001135 moved beyond 2008. See HECO T-17, Attachment 1, page 1 in the Company's Revised Schedules Resulting from Interim Decision and Order filed July 8, 2009. During Settlement, the Parties agreed to include adjustments resulting from the introduction of 2008 year-end actuals. Thus, plant additions included in the Statement of Probable Entitlement include 2008 recorded plant additions but do not include updates to 2009 plant addition estimates. For CIP1, this results in $456,832 (P0001052) and $523,193 (P0001135) being excluded.

Hawaiian Electric Company, Inc.
Campbell Industrial Park Generating Station and Transmission Additions
Amounts Closed to Plant by Project by Year
As of 10/31/09

Project No.	DIS	Description	Actual 2008 Closed in 2008	10/31/09 Act Closed as of 10/31/09	10/31/09 Act Included In CWIP	Est Cost To Be Incurred in 2009	Est 2010	Total
P0001052	4/22/09	CIP1 CEIP Substation Mod		603,567				603,567
P0001135	6/3/09	CIP1 Unit Addition-Microwave		738,480				738,480
P0001340	12/30/08	CIP1 Unit Addition-Easements	4,857,924					4,857,924
P0001585	5/27/08	CIP1 - Land - Gen Station	1,261,761					1,261,761
P0001050	7/27/09	CIP1 AES-CEIP#2 Trans. Line		7,438,819		119,474		7,558,293
P0001051	4/9/09	CIP1 AES Substation Add		3,774,469		110,279		3,884,748
P0001134	7/27/09	CIP1 Unit Addition-Fiber		601,524				601,524
P0001136	10/1/09	CIP1 Unit Addition-Kahe Bkrs		1,771,278		115,111		1,886,389
P0001137	4/1/09	CIP1 Unit Addition-Kalaeloa		210,680		15,951		226,631
P4900000	8/3/09	CIP1 Unit 1 Addition		147,025,261		12,674,866	650,000	160,350,127
P0001880	10/15/09	CIP1 Unit 1 Blackstart Diesel Generators		2,571,559		428,441		3,000,000
P0001881		CIP1 Unit 1 Water Treatment System			4,674,765	1,761,235	64,000	6,500,000
		Plant Additions	6,119,685	164,735,637	4,674,765	15,225,357	714,000	191,469,444
P0001084		Parcel between Hanua Street and AES Substation (TMK 9-1-26:38) included in Property Held for Future Use						1,809,875
		Total Project Cost						193,279,319
		Less - Costs Exceeding HECO-S-17A01 Estimate						
		P0001052						(21,052)
		P0001135						(41,938)
		P0001134						(80,562)
		P0001084						(16,923)
		HECO-S-17A01 Total Estimated Project Cost						193,118,844

Attachment 2 to the
STATEMENT OF FACTS

DECLARATIONS

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAII

In the Matter of the Application of **HAWAIIAN ELECTRIC COMPANY, INC.** **For Approval of Rate Increases and Revised Rate Schedules and Rules**	**DOCKET NO. 2008-0083**

DECLARATION OF ROBERT C. ISLER

1. I, Robert C. Isler, am Project Manager, Power Supply Engineering Department, Hawaiian Electric Company, Inc. ("Hawaiian Electric"). I make this declaration based upon my own personal knowledge and upon information and belief gained in that capacity, and in support of the accompanying motion.

2. My business address is 820 Ward Avenue, Honolulu, Hawaii.

3. With respect to the generating station component of the Campbell Industrial Park ("CIP") CT-1 project, two subcomponent systems were not completed as of August 3, 2009, including the two blackstart generators and the water treatment system. The blackstart generators were completed and placed in service as of October 15, 2009.

4. Based on standard accounting practices, Hawaiian Electric discontinued the accrual of AFUDC as of the dates CIP CT-1 components were placed in service.

5. The water treatment system for CIP CT-1 is expected to be placed in service by December 15, 2009.

6. As of October 31, 2009, the total costs recorded for the CIP CT-1 project components and subcomponents that are included in plant in service include (1) $6,119,685 for

the cost of land and easements acquired for the project in 2008, and (2) $164,735,637 for the other components (excluding the water treatment system, for which $4,674,765 had been recorded to CWIP). The amount recorded as of October 31, 2009 of $177,339,962 is over $14,000,000 in excess of the test year estimate of $163,279,651. The estimated costs to be incurred in the last two months of 2009, and in 2010 for the components that have been closed to plant in service include costs for work related to the plant site (including road paving, lighting, cameras, security and other miscellaneous work), and remaining construction management services. In addition, the costs related to certain of the change orders in the construction contracts are being negotiated. The estimated costs for 2010 reflect costs related to spare parts specific to the project that are not expected to be received until 2010.

I declare under penalty of perjury that the foregoing is true and correct.

DATED: Honolulu, Hawaii, November 19, 2009.

Robert C. Isler

ROBERT C. ISLER

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAII

In the Matter of the Application of **HAWAIIAN ELECTRIC COMPANY, INC.** **For Approval of Rate Increases and Revised Rate Schedules and Rules**	**DOCKET NO. 2008-0083**

DECLARATION OF CECILY A. BARNES

1. I, Cecily A. Barnes, am Manager of the Support Services Department for *Hawaiian Electric Company, Inc. ("Hawaiian Electric"), interning in biofuels projects.* I make this declaration based upon my own personal knowledge and upon information and belief gained in that capacity, and in support of the accompanying motion.

2. My business address is 475 Kamehameha Hwy., Pearl City, Hawaii, 96782.

3. Hawaiian Electric is still in the process of obtaining biodiesel supplies for the Campbell Industrial Park ("CIP") CT-1 unit.

4. On November 6, 2009, REG Marketing and Logistics, LLC began delivering biodiesel using 5,800 gallon (minimum) intermodal containers manufactured to International Organization for Standardization specifications, known as "ISO containers," on a suitable container chassis to Hawaiian Electric's CIP facility. Fuel is directly discharged from the ISO containers into one of the two fuel storage tanks at the CIP facility. The delivery of all approximately 400,000 gallons is anticipated to be completed by November 20, 2009.

5. 35 ISO containers of biodiesel containing an aggregate of approximately 200,000 gallons of biodiesel have been delivered to Hawaiian Electric's CIP facility as of November 13,

2009 as shown in Table 1. The remaining 35 ISO containers are scheduled to be delivered to CIP throughout the week of November 16, 2009 at the rate of approximately seven ISO containers per day.

Table 1. Deliveries received at CIP through 11/13/09

Date:	11/6/09	11/09/09	11/10/09	11/11/09	11/12/09	11/13/09	Total to-date
No. of Containers	1	8	7	4	7	8	35

6. Hawaiian Electric will conduct the biodiesel emissions data project beginning the week of November 30, 2009 in order to begin biodiesel operations in 2010.

7. Hawaiian Electric began evaluating proposals submitted in response to the RFP that were received by the RFP deadline of September 30, 2009. Hawaiian Electric is reaching conclusion of its evaluation of the proposals and is in the process of final negotiations with a selected supplier. The final biodiesel supply contract award for the two-year operational supply of biodiesel is expected to be completed by the week of November 30, 2009. Subsequently, Hawaiian Electric is targeting to submit a proposed contract to the Commission in early December, 2009. The ordering of the biodiesel according to the terms of the biodiesel supply contract is expected to commence upon a Commission decision approving the contract. The estimated lead time of the first biodiesel delivery under the planned biodiesel supply contract is 20 weeks from time of order placement.

I declare under penalty of perjury that the foregoing is true and correct.

DATED: Honolulu, Hawaii, November 19, 2009.

Cecily A. Barnes

CECILY A. BARNES

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAII

In the Matter of the Application of **HAWAIIAN ELECTRIC COMPANY, INC.** **For Approval of Rate Increases and Revised Rate Schedules and Rules**	**DOCKET NO. 2008-0083**

DECLARATION OF ROSS H. SAKUDA

1. I, Ross H. Sakuda, am Director of Generation Planning for Hawaiian Electric Company, Inc. ("Hawaiian Electric"). I make this declaration based upon my own personal knowledge and upon information and belief gained in that capacity, and in support of the accompanying motion.

2. My business address is 820 Ward Avenue, Honolulu, Hawaii.

3. On October 7, 2009, the recorded gross system peak for Hawaiian Electric reached 1,260 MW (1,213 MW-net). At the time of the peak, Chevron and Tesoro were serving their own internal loads with their cogenerating units. Had these cogenerating units not been operating, the adjusted gross system peak would have been approximately 1,284 MW (1,237 MW-net). The net peak forecast for October was 1,183 MW-net from the May 2009 forecast and 1,246 MW-net from the September 2008 forecast. The adjusted peak of 1,237 MW-net was 54 MW higher than the May 2009 forecast and 9 MW lower than the September 2008 forecast. This is summarized in the table below.

Month	Recorded Net Peak (a)	Standby Load (b)	Chevron Demand @ peak (c)	Tesoro Demand @ peak (d)	Recorded Peak w/ standby load adjustment (e) = (a)+(b)-(c)-(d)	May 2009 Net Peak Forecast (f)	Difference with Recorded (w/ standby) (g)= (e) - (f)	Sept 2008 Net Peak Forecast (h)	Difference with Recorded (w/ standby) (i)= (e) - (h)
Oct 2009	1,213	25	0.7	0	1,237	1,183	54	1,246	-8

I declare under penalty of perjury that the foregoing is true and correct.

DATED: Honolulu, Hawaii, November 19, 2009.

Ross H. Sakuda

ROSS H. SAKUDA

MEMORANDUM OF LAW

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAII

In the Matter of the Application of **HAWAIIAN ELECTRIC COMPANY, INC.** **For Approval of Rate Increases and Revised Rate Schedules and Rules**	**DOCKET NO. 2008-0083**

MEMORANDUM OF LAW IN SUPPORT OF MOTION

This Memorandum of Law is respectfully submitted on behalf of Hawaiian Electric Company, Inc. ("Hawaiian Electric" or "Company") in support of its Request for a Second Interim Increase for CIP CT-1 Revenue Requirements, or in the alternative, to Continue Accruing AFUDC for CIP CT-1 Project.

I. INTRODUCTION

The Campbell Industrial Park Generating Station and Transmission Addition Project ("CIP CT-1 Project") includes (1) the construction of a new generating facility (including the acquisition of a nominal 100 MW simple-cycle combustion turbine generator and related equipment and auxiliary facilities) (CT-1), (2) an approximately two-mile long 138 kV transmission line ("Transmission Line"), (3) expansion of Hawaiian Electric's existing Barbers Point Tank Farm site , (4) substation upgrades for the AES substation, Campbell Estate Industrial Park ("CEIP") Substation and Kahe Substation ("Substation Upgrades"), and (5) auxiliary equipment and facilities related to the foregoing.

The combustion turbine-generator was completed and placed in service (i.e., tied into the electrical grid and producing power) on August 3, 2009. Based on standard accounting practices, Hawaiian Electric discontinued the accrual of AFUDC as of that date.[1]

CIP CT-1 was installed as expeditiously as possible, in order to address the reserve capacity shortfall situation that has existed since 2006.[2] In its decision approving the commitment of expenditures for the CIP CT-1 project, the Commission stated:

> The commission first recognizes the **dire need** for additional generation due to the reserve capacity shortfall faced by HECO in recent years. In fact, as stated above, all Parties agree that additional generation is needed on HECO's system. The commission also finds that the need is immediate, and that the Project must be installed by July 2009 or as early as possible, as requested by HECO.

Decision and Order No. 23457 ("D&O 23457"), issued May 23, 2007, at 42-43 (emphasis added).

The unit is now installed, is connected to the grid, is available to provide electricity to Hawaiian Electric's customers if needed and, thus, has resolved the reserve margin shortfall situation faced by the Company since 2006.

The Commission has described the "long-standing regulatory compact" as follows:

> The regulatory compact has two aspects: (1) in return for a monopoly franchise, utilities accept the obligation to serve all comers; and (2) in return for agreeing to commit capital necessary to allow the utilities to meet the obligation, utilities are assured a fair opportunity to earn a reasonable return on the capital prudently committed to the business. In Wash. Util. and Trans. Comm'n v. Puget Sound Power & Light Co., 62 P.U.R.45th [sic] 557, 581 (1984), the Washington Commission explained the regulatory compact in this fashion:

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[1] Other project components were placed in service on October 1 and October 15, 2009, as is discussed in Part II of the attached Statement of Facts. Hawaiian Electric discontinued the accrual of AFUDC on those components as of those dates. The CIP CT-1 Project includes land and easements that were acquired at a cost of $6,119,685 in 2008. See Part II of the attached Statement of Facts. Hawaiian Electric would not be able to accrue AFUDC on these real property interests.

[2] Given the urgent need, Hawaiian Electric also took a number of steps to mitigate the effects of reserve capacity shortfalls, such as (1) installing temporary, limited run-hour distributed generators at substations or other sites, (2) implementing additional load management and other demand reduction measures, (3) pursuing efforts to improve the availability of generating units, (4) negotiating and obtaining approval of the Kalaeloa amendments adding 28MW of firm capacity in 2005, and (5) permitting and designing the CIP CT-1 so that it could be installed in 2009.

> The social and economic compact of utility regulation begins with the premise that a regulated utility has an obligation to serve the public. [A] utility possesses an unending obligation to provide service to anyone within the service territory of that utility who demands service in accordance with approved tariffs.
>
> However, in order for the social duty to serve to be viable, the compact must also provide for a utility to recover expenses it prudently undertakes to meet the obligation. (Emphasis original.)

Re Citizens Utilities Company, Kauai Electric Division, Docket Nos. 94-0097 & 94-0308, Decision and Order No. 14859 (August 7, 1996) at 13.

Given its obligation to serve, Hawaiian Electric expended substantial funds in order to bring the CIP CT-1 Project on-line as soon as possible. Having installed CIP CT-1, with the approval of the Commission, in order to meet its obligation to serve, Hawaiian Electric should be provided with a reasonable opportunity to earn a fair return on its investment in the unit.

Under standard ratemaking practices, Hawaiian Electric would be able to begin earning a return on its investment in the project components through an interim rate increase that includes the revenue requirements for the CIP CT-1 Project on an average test year basis (as is reflected in the Parties' Stipulation), or through an interim step increase when the project components go into service that includes the revenue requirements for the full costs of the CIP CT-1 Project (as Hawaiian Electric proposed in its application).

An electric utility earns a return on the investment in property added to serve customers in two ways. During the pre-service period, the utility earns an Allowance for Funds Used During Construction ("AFUDC"), which is accrued and added to the capital cost of the project. Once the project is placed in service, the cost of the project is included in rate base, and the utility must be afforded an opportunity to earn a fair return on the cost of the project that is

prudently incurred. (The utility also depreciates the cost of the project for ratemaking purposes.[3])

Capital costs include a fair return on investment (which is referred to as the rate base), and a return of investment (referred to as depreciation). Before capital projects are placed in service, the return on investment is recovered through AFUDC. Once capital projects are placed in service, however, AFUDC is discontinued.

It is essential and in the public interest (that is, in the interests both of the stockholders and the ratepayers) that public utilities be permitted to charge rates which cover all of their reasonable costs of providing service, including their costs of capital. The reason, of course, is that if a utility's rates do not provide it with sufficient revenues to cover its cost of providing service, then some aspect of its service will suffer. If the utility cannot earn its authorized fair rate of return, then, by this Commission's definition of a fair return, the utility will not be able to attract the capital necessary to replace plant and equipment at reasonable rates, upgrade service where appropriate or add new plant and equipment to meet its obligation to serve all customers new and old alike.

The fundamental tenet of ratemaking that rates must cover the costs of providing service is well known. The basic question in a rate case (apart from rate structure issues) is how to set rates for the future that will provide the utility with a real opportunity to receive revenues that cover its operating expenses plus its cost of capital.

In recognition of this tenet, the Hawaii Public Utilities Commission, in the past, has been very supportive of the efforts and needs of Hawaii electric utilities to begin recovering their revenue requirements associated with the addition of new generating units (whether owned by

[3] For Hawaiian Electric, depreciation begins to accrue for book and ratemaking purposes in the year following the year in which the project is placed in service.

the utilities or by non-utility generators and acquired through firm power purchase agreements), and of other large capital projects. The mechanisms employed to allow recovery to begin at the time the utility begins incurring the revenue requirements have varied, but the end result has been the timely recovery of the revenue requirements.

It is well established that property that services both current and future needs should be included in rate base. Thus, if a utility has taken prudent steps to meet the future needs of its customers in adding new plant, that new plant should be included rate base. There are numerous electric utility examples where the Hawaii Public Utilities Commission, and regulatory commissions in other jurisdictions, have approved the inclusion in rate base of the costs of projects that were installed in logically sized increments, even though all or part of the capacity may not have been needed immediately once it was installed. See authorities discussed in this Part II of this Memorandum.

For example, the Oregon Public Utility Commissioner held that exclusion of a generating unit from rate base, because it had come on line during an energy surplus, would be unsound from a regulatory policy standpoint:

> Specifically, the argument ignores not only the public service obligation of utilities, but also the realities of resource planning and the adverse financial consequences that would inevitably ensure for the utility and its ratepayers.
>
> Under current economic conditions, the time necessary to complete construction of a major generating facility ranges from six to twelve years. If the on-line date of a plant happened to coincide with an energy surplus, the project would assign all cost responsibility to the utility's shareholders, regardless of whether the original decision to construct the plant was reasonable and prudent. This approach to rate making would have extremely undesirable consequences. The risk of holding utility securities would increase substantially, reducing stock prices and bond ratings, and resulting in much higher capital costs. The likelihood of energy shortages would also increase because of the reluctance of utility management to assume absolute responsibility for the timing of new generating facilities. Under either scenario, the impact upon customers would be the same – higher utility rates because of an unstable regulatory environment.

Re Pac. Power & Light Co., 63 P.U.R.4th 642, 645-46 (Ore. PUC 1984).

Generation held for reserve, standby or emergency capacity also has been deemed to be used and useful for utility purposes, as discussed in Part III of this Memorandum. If CIP CT-1 is not included as plant in service, then CIP CT-1 should be included as property held for future use, as discussed in Part IV of this Memorandum.

In order to include the costs of the CIP CT-1 Project in rates, Hawaiian Electric has requested that the Commission issue a Second Interim Decision and Order. There is substantial precedent for the issuance of a second interim rate increase in Hawaii rate cases, as discussed in Part V of this Memorandum.

The second interim increase and an opportunity to earn on Hawaiian Electric's investment in CIP CT-1 are essential to assure confidence in the financial integrity of the Company and to maintain its credit, as discussed in Part VI of this Memorandum.

II. INCLUSION OF CIP CT-1 IN UTILITY PLANT IN SERVICE

As defined in the NARUC Uniform System of Accounts, "Utility Plant in Service" is a balance sheet account (account no. 101) that includes "the original cost of utility plant, included in the plant accounts prescribed herein and in similar accounts for other utility departments, including common utility plant, owned and used by the utility in its operations, and having an expectation of life in service of more than one year from date of installation . . . ."[4]

It is well established that property that services current needs, or both current and future needs, should be included in rate base as utility plant in service. Thus, if a utility has taken prudent steps to meet the future needs of its customers in adding new plant, that new plant should

[4] Emphasis added. NARUC's utility plant instructions for account no. 101 further provide that: (1) separate sub-accounts shall be maintained for each utility department; and (2) the cost of additions to and betterments of property leased from others, which are includible in account no. 101, shall be recorded in subdivisions separate and distinct from those relating to owned property.

be included rate base. There are numerous electric utility examples where the Hawaii Public Utilities Commission, and regulatory commissions in other jurisdictions, have approved the inclusion in rate base of the costs of projects that were installed in logically sized increments, even though all or part of the capacity may not have been needed immediately once it was installed.

The Commission's decision in Hawaiian Electric's 1974 test year rate case is instructive:

> The Staff proposed to disallow in the rate base one-half of the cost of Kahe Generating Unit No. 5, which is scheduled to go into commercial operation in November, 1974, on the grounds that it is excess capacity and will not actually be needed at that time because of the slower rate of growth due to the recent energy crisis. This proposal reduces the rate base by approximately $14,600,000. . . . Heco cited a number of court and commission decisions[1] indicating that commissions have included in the rate base excess capacity which has been prudently acquired and the use of which may be anticipated with reasonable precision, even though the plant would not actually be in service by the end of the test year. In the present case, Kahe 5 will actually be in service at the end of the test year. Under all the circumstances, the Commission is of the opinion that the full cost of Kahe 5 must be included in the rate base.
>
> [1] Baltimore Gas & Electric Co. v. People's Counsel, 220 Md. 373, 152 A.2d 825 (1959); Southern New England Tel. Co. vs. Public Util. Comm'n, 29 Conn. Super. 253, 282 A.2d 915, 920 (1970); Re New Haven Water Co., 49 P.U.R. (N.S.) 229 (Conn. P.U.C. 1943); Re Consumers of Edison Electric Illuminating Co. of Boston, 5 P.U.R. (N.S.) 369 (Mass. Dept. of Pub. Util., 1943); Wisconsin Telephone Co. v. Public Service Commission, 30 P.U.R. (N.S.) 65, 287 N.W. 122 (S. Ct. Wis. 1939); Re Consolidated Edison Co. of N.Y., 54 P.U.R.3d 43 (N.Y. Com. 1968); Latourneau v. Citizens Utilities Co., 59 P.U.R.3d 1, 209 A.2d 307 (Vt. S. Ct. 1965).

Re Hawaiian Elec. Co., Docket No. 2296, Decision and Order No. 3546 (August 19, 1974) at 5-6.

The Commission reached the same conclusion that it had reached in its 1974 Hawaiian Electric decision in Re Hawaii Elec. Light Co., 13 P.U.R.4th 329 (1976):

> Another major difference between the parties was the inclusion in the rate base of the depreciated cost of certain generating plant. The division excluded from the rate base 50 per cent of the depreciated cost of 26 megawatts of generating plant it contended was "least used." Lima Kokua contended that depreciated cost

> of the 23-megawatt generation plant known as Hill 6, HELCO's newest plant addition, should be removed from the rate base.

Id. at 336-37. The Commission rejected the contentions of both the Public Utilities Division ("PUD," now the Consumer Advocate) and Lima Kokua, both of which were predicated on claims that HELCO had excess capacity after adding new generation, because load growth had not materialized due to the "energy crisis." Id. at 337. With respect to the PUD's contention, the Commission concluded:

> After reviewing the evidence in the record on this point, the commission concludes that these generating units, or so-called "least-used plant," are not excess but were prudently added to the system and are actually used and useful and will be used in the future. Consequently, it appears reasonable that such plant is used and useful for utility purposes within the meaning of § 269-16(a) of the Hawaii Revised Statutes and, therefore, has to be included in the rate base.

Id. at 338.

The common theme in these cases is that (1) the utility had taken prudent steps to meet the future needs of its customers in adding new plant, (2) the plant was actually being used, and (3) the challenged plant will be used in the future.

The holdings in the Hawaii Commission cases are consistent with the holdings in cases from other jurisdictions.

As explained in S. New England Tel. Co. v. Pub. Util. Comm'n, 29 Conn. Supp. 253, 260, 282 A.2d 915, 919-20 (1970), the norm or standard is set out in 73 C.J.S. Public Utilities § 18, page 1017 in the following language:

> [P]roperty or equipment provided or acquired in anticipation of reasonable future need should be allowed as part of the rate base even though wholly or partially unused at the time to which the inquiry relates. In determining whether excess plant capacity shall be included in the rate base, a utility must have some latitude with respect to plant enlargement undertaken to meet the requirement imposed on it to furnish service when and as demanded by the public, and, while the utility must bear the burden of an unreasonable extension of its plant and the risk that portions of it prudently acquired may become obsolete or not useful, it should not

> be penalized for failure exactly to anticipate future demands for service in a period of depression.

A detailed discussion of the foregoing standard is set forth in Cent. La. Elec. Co. v. La. Pub. Serv. Comm'n, 508 So. 2d 1361 (1987), wherein the Supreme Court of Louisiana found the Louisiana Public Service Commission's ("LPSC") denial of a $51.7 million rate increase (primarily associated with inclusion in Central Louisiana Electric Company's ("CLECO") rate base of CLECO's one-half interest in a 640 MW generating plant) to be "unreasonable, arbitrary and confiscatory . . . ." Id. at 1371. In the CLECO case, the LPSC argued that "CLECO should bear the cost of 'overcapacity' created by" the generating plant, and stated in its order that "[w]e do not believe it to be unreasonable for the Company and its stockholders to bear or at least share in the costs of overcapacity during such economic times." Id. at 1367.

The Supreme Court of Louisiana disagreed, stating that "[t]he real issue, however, is not overcapacity, but rather whether or not [the plant] is 'used and useful' in rendering utility service. If [the plant] is 'used and useful,' then it belongs in the rate base." Id. In its analysis, the Louisiana court explained that "[t]he 'used and useful' determination consists of two components: (1) in service, and (2) reasonably necessary." Id. (citing City of Evansville v. S. Ind. Gas & Elec. Co., 167 Ind. App. 472, 516, 339 N.E.2d 562, 589 (1975)). With respect to the "reasonably necessary" requirement, the court stated:

> [O]vercapacity, of course, does not appear to satisfy it. Overcapacity, however, must be looked at realistically. "As a matter of sound business judgment, utilities must build beyond their immediate needs. If their investments are provident and are made both in good faith and in the best interests of the area served, they plainly belong in the rate base." Priest at 181.
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> In Latourneau v. Citizens Utilities Co., 125 Vt. 38, 209 A.2d 307 (1965), the Supreme Court of Vermont held it was erroneous for the Commission to have excluded part of the construction costs of a fully constructed transmission line which provided excess capacity. The court observed the utility's decision to construct the facility was prompted by a need to supplement the existing facilities. Although there was disagreement as to exactly when the facilities would be used

> at full capacity, it was undisputed that such use would occur during the useful life of the transmission line. Further, there was no indication that poor business judgment had been employed in constructing the line. The court remarked "[m]anagement must plan for the future to meet the demands of the people for additional service. Construction to meet such demand cannot be started one day and completed the next." Id. at 313. Analogously, although [the plant] is not currently being operated at its full capacity, it is estimated that such use will occur by 1994.
>
> Property or equipment provided or acquired in anticipation of reasonable future need should be allowed as part of the rate base even though wholly or partially unused at the time to which the inquiry relates. In determining whether excess plant capacity shall be included in the rate base, a utility must have some latitude with respect to plant enlargement undertaken to meet the requirement imposed on it to furnish service when and as demanded by the public, and, while the utility must bear the burden of an unreasonable extension of its plant and the risk that portions of it prudently acquired may become obsolete or not useful, it should not be penalized for failure exactly to anticipate future demands for service in a period of depression. Idaho Underground Wat. US. Ass'n v. Idaho Power Co., [89 Idaho 147] 404 P.2d 859, 867 (Idaho 1965), citing C.J.S. Public Utilities § 18a, p. 1017.
>
> The long term best interests of ratepayers is not promoted by penalizing utilities for excess capacity via rate base exclusions or by denying the company a return on a completed facility while simultaneously taking full advantage of its operating efficiency. Berlin, Excess Capacity, Plant Abandonments, and Prudent Management, 114 Pub. Util. Fort. 26, 29 (Nov. 22, 1984).

Cent. La. Elec. Co., 508 So. 2d at 1368 (footnotes omitted).

Similarly, in Kan. Gas and Elec. Co. v. State Corp. Comm'n, 218 Kan. 670, 544 P.2d 1396 (1976), the Supreme Court of Kansas found an order of the State Corporation Commission ("SCC") to be unlawful where the SCC denied an application of Kansas Gas and Electric Company ("KGEC") to include the entire value of a generation plant in rate base, on the grounds that the plant was not capable of operating at full capacity. In the KGEC case, the SCC found that although a certain KGEC electric generation plant was in "significant use," the plant was not

"required to be used," and thus excluded from rate base one-third of the value of KGEC's interest in the plant.[5]

On appeal, a Kansas district court held that, " . . . [A] generating plant is a unit and it is either used or required to be used, or not used or not required to be used, and therefore it should be included in full or excluded in full . . . ." Id. at 672, 544 P.2d at 1398. Citing 73 C.J.S. Public Utilities § 18, the Supreme Court of Kansas affirmed the district court's ruling, and further noted that:

> The statute prescribes a two-phase duty of the commission; first, to determine the property of a utility used or required to be used in its services to the public; and, second, to ascertain the reasonable value of such property whenever it deems the ascertainment of such value necessary in order to fix fair and reasonable rates. We discern nothing in the statute which authorizes the commission to determine that a certain facility is partially used or required to be used and partially not. If the legislature had so intended, it would have been a simple matter to include in the statute such words as 'or whatever fraction or percentage of such property is used or required to be used.' This is not to say that a unit or segment of a facility that has become obsolete or whose production is far in excess of present or near future needs, or for any valid reason, is not used or required to be used and can be setoff or separated from a facility otherwise used, cannot be excluded from rate base under the statute. But that is not the case here.

Id. at 674, 544 P.2d at 1400.

In Re Pac. Power & Light Co., 63 P.U.R.4th 642 (Or. PUC 1984), intervenors recommended that Pacific Power & Light Co.'s ("PP&L") coal fire generating facility ("Colstrip Unit 3") be removed from its rate base. Intervenors contended, among other things, that (1) Colstrip Unit 3 was not used and useful because the plant had been placed in service during a

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[5] In determining the property to be included in the rate base of a public utility under the provisions of K.S.A. 66-128, the question whether property is used or required to be used is one of fact to be determined by the State Corporation Commission. If the property is found either used or required to be used it is to be included in the rate base. Kan. Gas & Elec. Co. v. State Corp. Comm'n, 218 Kan. 670, 544 P.2d 1396 (1976).

The tenor of the SCC's findings had been that the plant, due to mechanical problems arising from the antipollution control system, was operating at a low percentage of capacity during the time interval in question and, thus, only two-thirds of the reasonable value thereof should be included in the rate base. See id. at 674, 544 P.2d at 1400.

period of surplus capacity, (2) Colstrip Unit 3 was not an economical resource, and (3) prudent resource planning would have resulted in a deferral of Colstrip Unit 3 construction. See id. at 644.

The Oregon Public Utility Commissioner ("PUC") held that: (1) despite the utility's existing surplus, Colstrip Unit 3 was presently used to provide electric service to Oregon customers and was useful to ratepayers in a number of respects (see id. at 645); (2) the appropriate focus of inquiry was not whether Colstrip Unit 3 was the most economical resource, but whether the utility's decision to proceed with construction was prudent at the time it was made (see id. at 647); and (3) PP&L's actions, including its decision to complete Colstrip Unit 3, were reasonable and prudent, and that intervenors' claims that Colstrip Unit 3 could have been economically deferred and that PP&L continued construction of Colstrip Unit 3 despite knowledge of a surplus were unsubstantiated (see id. at 647-48).

In addition, the Oregon PUC held that exclusion of the Colstrip Unit 3 from rate base because it had come on line during an energy surplus would be unsound from a regulatory policy standpoint:

> Specifically, the argument ignores not only the public service obligation of utilities, but also the realities of resource planning and the adverse financial consequences that would inevitably ensure for the utility and its ratepayers.
>
> Under current economic conditions, the time necessary to complete construction of a major generating facility ranges from six to twelve years. If the on-line date of a plant happened to coincide with an energy surplus, the project would assign all cost responsibility to the utility's shareholders, regardless of whether the original decision to construct the plant was reasonable and prudent. This approach to rate making would have extremely undesirable consequences. The risk of holding utility securities would increase substantially, reducing stock prices and bond ratings, and resulting in much higher capital costs. The likelihood of energy shortages would also increase because of the reluctance of utility management to assume absolute responsibility for the timing of new generating facilities. Under either scenario, the impact upon customers would be the same – higher utility rates because of an unstable regulatory environment.

Id. at 645-46.

In a District of Columbia Public Service Commission ("D.C. PSC") case, the D.C. PSC declined to adopt the Office of the People's Counsel ("OPC") proposed disallowance of Chesapeake and Potomac Telephone Co.'s ("C&P") investment in fiber optics. OPC contended that C&P had overinvested in fiber optics, and the bulk of the installed fiber plant had not yet been activated. The D.C. PSC concurred with C&P, finding that OPC's "request to disallow the cost of fiber which C&P has laid out but not 'lit' is unpersuasive", and explaining that C&P should be "encouraged, not penalized, for prudently modernizing its network, planning for future needs, and providing for route diversity and network survivability." Re Chesapeake & Potomac Tel. Co., 130 P.U.R.4th 310, 342-44 (D.C. P.S.C. 1992), modified, Re Chesapeake & Potomac Tel. Co., No. 850, Order No. 9983, slip. op. (D.C. P.S.C. March 6, 1992).

"It is in the nature of things that projections of future circumstances are rarely precise. This is especially the case in the area of electric utility reliability where underestimations of needed reserves could spell disaster." Re S. Cal. Edison Co., 1977 F.P.C. LEXIS 67, *25, 23 P.U.R.4th 44 (1977). "[I]t would certainly be unreasonable to expect that any electric utility would have the forecasting capability to predict the level of capacity necessary to precisely satisfy [the used and useful] standard, or the flexibility, considering the extensive lead time involved, to construct additional capacity in the exact increments necessary to meet it. Hindsight is always perfect and before the Commission will consider denying a return on property actually used in providing service something more need be shown than that the company's foresight was not." Re Columbus & S. Ohio Elec. Co., 1978 Ohio PUC LEXIS 3, * (Ohio PUC 1978).

III. RESERVE, STANDBY OR EMERGENCY CAPACITY

Generation held for reserve, standby or emergency capacity has been deemed to be used and useful for utility purposes. For example, in Re Detroit Edison Co., 1980 Mich. PSC LEXIS 1077, 35 P.U.R.4th 429 (1980), the Michigan Public Service Commission ("PSC") allowed an electric utility to include in plant-in-service property held "in an emergency standby posture" based on (1) a finding that "the costs associated with maintaining [the generating plant] on 'economy reserve' are not as high as the benefits which might accrue should an emergency of a continuing nature arise"; and (2) the commission's belief "that this is a reasonable hedge against construction schedules and forecasting errors and find[ing] that the [generating plant] should not be removed from plant-in-service." Id. at *22. The Michigan PSC added that in considering whether plant is used and useful, "catchwords and catchy phrases can be misleading if common sense is not used when applying them to the facts of a case like this. The rationale behind the 'used and useful' standard is to avoid allowing a utility to earn a return on property which is not being utilized toward the ultimate goal of providing service to utility customers." Id.

Similarly, in Re Fla. Power and Light Co., 1982 Fla. PUC LEXIS 45 (1982), the Florida PSC allowed an electric utility to retain in property held for future use[6] the net utility plant associated with its two remaining cold standby units at a cost of $61,617,000 "until such time as the decision to place them in cold standby is demonstrated to be imprudent." Id. at *34.

Standby generation has also been included in rate base despite a government mandate banning the use of such equipment. Such was the case in Re Cleveland Elec. Illuminating Co., 1973 Ohio PUC LEXIS 1 (1973), wherein the Ohio PUC permitted standby coal equipment to be included in rate base even though the federal Environmental Protection Agency had in effect ordered the equipment out of service. The Ohio PUC's decision in that case noted that: (1) "the

[6] "Property held for future use" is discussed below.

President of the United States has urged delay of changeovers from coal to oil fired equipment and in fact federal legislation requiring change back to coal during the energy crisis is currently under active consideration by congress," and (2) there was a "very real probability that coal operations may resume." Id. at *15-16.

IV. PROPERTY HELD FOR FUTURE USE

If CIP CT-1 is not included as plant in service, then CIP CT-1 should be included as property held for future use. In Hawaii, "[t]he Commission is of the opinion that by the very nature of the utility business, property must be acquired in advance of actual use in order that the planning, design, and construction of various plants be done on an orderly fashion." Re Maui Electric Co., Docket No. 4156, Decision and Order No. 6953 (January 15, 1982) at 44. Accordingly, a utility may include in its rate base property held for future use, which the Commission has described as "property owned by HECO and held for future utility purposes. It represents HECO's investment in sites needed to provide electric service in the future." Re Hawaiian Electric Co., Docket No. 04-0113, Decision and Order No. 24171 (May 1, 2008) at 59.[7]

As defined in the NARUC Uniform System of Accounts, "Property Held for Future Use" is a balance sheet account (account no. 105) that includes the original cost of property owned and held for future use in utility service under a definite plan for such use. The account includes: (1) "property acquired but never used by the utility in utility service, but held for such service in the future under a definite plan"; and (2) "property previously used by the utility in utility service, but retired from such service and held pending its reuse in the future, under a definite plan, in

[7] HECO-S-1701 provides the CIP CT-1 plant additions and property held for future use as settled between the Parties and used to derive the rate base reflected in Exhibit 1 of the Statement of Probable Entitlement filed on May 18, 2009. The estimated capital costs of the CIP CT-1 Project for purposes of this rate case are $163,279,651, as shown on HECO-S-1701. A copy of the exhibit is provided as Attachment 1 to the Statement of Facts. Of that amount, however, $1,809,875 represents the cost of the parcel between Hanua Street and the AES Substation that is now included in Property Held for Future Use, and no longer included in the cost of any of the project cost components. HECO-S-1701.

utility service."[8] However, "materials and supplies, meters and transformers held in reserve, and normal spare capacity of plant in service" are not included in this account.

Courts have emphasized the nature of the inquiry which must be made by a commission with respect to property held for future use. For example, in Petition of New England Tel. & Tel. Co., 115 Vt. 494, 506, 66 A.2d 135, 143 (1949) the court stated:

> In making this determination it should consider whether the purchase of the property in question was made in pursuance of honest and reasonable business judgment in carrying out some definite plan, for example, or whether the expenditure was dishonest, wasteful or imprudent. The time within which it may reasonably be expected that the property will be used is, as we have indicated, very important in determining the question.

In addition, "Such property may be included in the rate base if the regulatory body determines that its acquisition was reasonably necessary and its use may be anticipated with reasonable precision, or if, it has sometimes been held, the property is likely to be placed in service within the period for which the rates are fixed." Baltimore Gas & Elec. Co. v. McQuaid, 220 Md. 373, 380, 152 A.2d 825, 828-29 (1959).

V. JUSTIFICATION FOR SECOND INTERIM

There is substantial precedent in Hawaii for the issuance of a second interim rate increase. For example, by Interim Decision and Order No. 11081 ("Interim D&O 11081"), filed May 10, 1991 in Docket No. 6531 (Hawaiian Electric's 1990 test year rate case), the Commission granted an increase in rates on an interim basis to Hawaiian Electric to recover costs under a purchased

[8] NARUC's guidelines regarding property held for future also provide rules for situations where: (1) property held in this account ceases to be needed or appropriate for future utility operations; and (2) the utility experiences gains or losses from the disposition of property held in this account. In addition, per NARUC's guidelines, property held for future use is classified according to the detailed accounts prescribed for utility plant in service, and the account is maintained in such detail as though the property were in service. Separate accounts are required to be maintained for each utility department for which plant is held for future use. Under NARUC's guidelines, normally, service life during which depreciation is computed commences with the date the property is includible in utility plant in service. Thus, depreciation would not commence on property held for future use until it is transferred to utility plant in service.

power agreement with an independent power producer, even though the actual purchase of power under the contract would commence after the end of the 1990 test year. Hawaiian Electric's 1990 test year rate case was divided into three phases: (1) interim modification to Hawaiian Electric's fuel clause, (2) general step increase, and (3) step increase to reflect the costs under a purchased power agreement between Hawaiian Electric and Kalaeloa Partners, L.P. ("Kalaeloa"), if the general step increase in the second phase did not include such costs.

Hawaiian Electric informed the Commission that Kalaeloa's 180 MW facility was expected to be commercially operational in May 1991. Hawaiian Electric requested that if a final decision and order was not issued prior to May 1991, the Commission issue an order allowing Hawaiian Electric to recover on an interim basis its payments for the capacity charge and for the nonfuel component of the energy charge. The Consumer Advocate and the Department of Defense did not object to Hawaiian Electric's requested interim relief, subject to refund, although the actual purchase of power under the contract would not commence until after the end of the 1990 test year. See Interim D&O 11081 at 4, 6.

Interim D&O 11081 (page 11) stated:

> Based on the evidentiary record before the commission, HECO is probably entitled to an increase in its rates on an interim basis. Without interim rate relief, HECO may be denied recovery of its costs it expends under the Kalaeloa contract when the Kalaeloa project becomes commercially operational.
>
> For interim decision purposes, pending a final decision in this docket, an increase in HECO's annual revenues of $45,987,000 is just and reasonable, as set forth in Exhibit A.

In Docket No. 7000, which utilized a 1993 test year as well as a 1992 test year, the Commission authorized two step increases in 1993 for Maui Electric Company, Limited ("MECO") (timed to coincide with the addition of the units to MECO's system) based on the

annual costs and benefits of adding M16 and M15 to MECO's system. In particular, the Commission approved (1) a general interim increase for a normalized 1993 test year by Interim Decision and Order No. 12163, issued January 29, 1993, (2) an interim Maalaea Unit 16 step increase (based on 100% of the cost of the unit) for the Maui Division by Interim Decision and Order No. 12378, issued May 7, 1993, following a motion filed April 23, 1993, and (3) an interim Maalaea Unit 15 step increase (based on 100% of the cost of the unit) for the Maui Division by Interim Decision and Order No. 12774, issued October 21, 1993 (which noted that a further motion was not necessary).[9]

Similarly, in Docket No. 7766, the Commission approved a general interim rate increase for Hawaiian Electric at the beginning of a 1995 test year by Interim Decision and Order No. 13716, issued December 30, 1994 ("Interim D&O 13176"), and a further interim increase for the Waiau-CIP Transmission Lines (based on 100% of the cost of the lines) by Interim Decision and Order No. 14195, issued August 30, 1995 ("Interim D&O 14195"). The first phase of the transmission project went into service on June 30, 1995 and the second phase went into service on August 15, 1995. In Interim Decision and Order No. 13716, issued at the end of the prior year, the Commission had deferred consideration of the proposed step increases for the two phases of the project in light of doubts expressed by the Consumer Advocate as to whether the projects could be completed in 1995. See id. at 9-10. Thus, when it was clear that the lines would be operational, Hawaiian Electric filed a motion requesting interim approval to implement the steps on the grounds that:[10]

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[9] The annual costs included depreciation expenses. (The impact of the adjustment to include the full costs of these generating units on revenue requirements was offset to some extent in the final decision and order by recognizing annual sales and revenues (net of fuel expense) for new customers added in 1993.)

[10] The Consumer Advocate opposed the motion on various grounds, each of which arguments were rejected by the Commission. See Interim D&O 14195 at 2-7.

> By allowing the Waiau-CIP Part 1 and Waiau-CIP Part 2 Step Increases, (1) the Company is protected from not being able to recover the costs associated with its investment in, and operation of, Waiau-CIP Part 1 and Waiau-CIP Part 2, (2) HECO's customers would not be prematurely charged for the costs of Waiau-CIP Part 1 and Waiau-CIP Part 2 (especially since Waiau-CIP Part 1 is presently in service), (3) HECO's customers would receive the full benefits of Waiau-CIP Part 1 and Waiau-CIP Part 2 at the time of the increase (HECO's customers are already receiving the benefits of Waiau-CIP Part 1), and (4) HECO's customers would not be placed at a disadvantage as the revenues collected through the Waiau-CIP Part 1 Step Increase and the Waiau-CIP Part 2 Step Increase would be subject to refund.[11]

Although the Commission noted in Interim D&O 14195 that "[a]s a general rule, annualization of a capital project completed and placed in service during the test year is not allowed where, as here, the averaging principle is utilized" (id. at 4), the Commission stated that "under special circumstances deviations from the general rule are sometimes allowed" (id. at 5), and explained in part:

> [T]he costs of the projects are significant (about $56 million) and, unless they are allowed to be annualized, there is a strong likelihood that HECO will file another application for a rate increase immediately upon the completion of this rate case. The avoidance of annual rate cases is a legitimate objective of a rate proceeding. Annualization will permit HECO to recover the substantial costs of the Waiau-CIP projects over the period the rates established in this docket will be in effect, thus precluding the need for another rate case in the immediate future.

Id. at 6. Accordingly, the Commission's findings of fact and conclusions of law stated that, among other things: "Without interim relief, HECO may be denied an opportunity to earn a fair return on its rate base" (id. at 7, para. 3); and "An interim increase reflecting the addition of Waiau-CIP Part 1 and Waiau CIP Part 2 in HECO's rate base, on an annualized basis, is reasonable" (id. at 8, para 6).

The Commission also has approved the use of step increases for purchase power agreement ("PPA") capacity costs, based on the full annual costs of such PPAs, in prior cases. In

[11] Hawaiian Electric's Memorandum in Support of Motion for Step Increases for Waiau-CIP Part 1 and Waiau-CIP Part 2, filed July 27, 1995 in Docket No. 7766 at 8.

Docket No. 99-0207, HELCO's 2000 test year rate increase, the Commission approved a general interim rate increase by Interim Decision and Order No. 18008, issued September 1, 2000, and an interim Hamakua Energy Partners (HEP) step increase (based on the full cost of the power purchase arrangement) by Interim Decision and Order No. 18296, issued January 5, 2001 after HEP began commercial operations at the end of 2000.

In Docket No. 6998, which utilized a 1992 test year, the Commission authorized a step increase in September 1992 for HECO's PPA with AES Barbers Point, Inc. ("AES-BP", now known as AES Hawaii, Inc.), by which HECO added another 180 MW to its system. The 1992 test year revenue requirements in Docket No. 6998 included the annual costs and benefits for the AES-BP PPA, even though AES-BP went into commercial operation in September 1992.

There have been earlier cases as well, as identified in HECO T-1, pages 15-16, in support of the proposed CIP CT-1 step increase.

VI. FINANCIAL INTEGRITY

The Commission has held that a fair rate of return for a utility must:

> (1) be commensurate with returns on investment in other enterprises having corresponding risks and uncertainties;
>
> (2) provide a return sufficient to cover the capital costs of the business, including service on the debt and dividends on the stock; and
>
> (3) provide a return sufficient to assure confidence in the financial integrity of the enterprise to maintain its credit and capital-attracting ability.

Re Hawaiian Elec. Co., Docket No. 7766, Decision and Order No. 14412 (December 11, 1995) at 47, citing Bluefield Waterworks and Improvement Co. v. Pub. Serv. Comm'n, 262 U.S. 679 (1923), and Fed. Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591 (1944). See also Re Hawaii Elec. Light Co., Docket No. 94-0140, Decision and Order No, 15480 (April 2, 1997) at 31; Re Maui Elec. Co., Docket No. 97-0346, Amended Decision and Order No. 16922 (April 6,

1999) at 33; Fed. Power Comm'n v. Memphis Light, Gas & Water Div., 411 U.S. 458 (1973); Permian Basin Rate Cases, 390 U.S. 747 (1968); Duquesne Light Co. vs. Barasch, 488 U.S. 299 (1989).

"Rates which are not sufficient to yield a reasonable return on the value of the property used at the time it is being used to render the service are unjust, unreasonable and confiscatory, and their enforcement deprives the public utility company of its property in violation of the *Fourteenth Amendment*." Bluefield Water Works & Improvement Co., 262 U.S. at 690, 43 S. Ct. at 678.

The second interim increase and an opportunity to earn on Hawaiian Electric's investment in CIP CT-1 are essential to assure confidence in the financial integrity of the Company and to maintain its credit.

Mr. Steven Fetter elaborates on the importance of maintaining financial strength in HECO T-21. One of the principal measures of a company's financial strength is its credit rating. The Company currently has corporate credit ratings of BBB by Standard & Poor's ("S&P")[12] and Baa1 by Moody's Investors Services ("Moody's").[13]

The BBB rating by S&P is of particular concern because that rating puts the Company only one notch above the minimum "investment grade credit rating".[14] Prior to May 2007, S&P's corporate credit rating of Hawaiian Electric had been BBB+. In May 2007, S&P downgraded the Company to BBB. In May 2008, S&P maintained the Company's BBB credit

[12] S&P Ratings Direct "Hawaiian Electric Co. Inc." dated May 23, 2008 filed as HECO-2008.
[13] Moody's Credit Opinion: Hawaiian Electric Company, Inc. dated December 10, 2007 filed as HECO-2009. In September 2008, Moody's maintained its ratings and stable outlook for HECO. Moody's stated, "The rating could be downgraded should weaker than expected regulatory support emerge at HECO, including the continuation of regulatory lag, which ultimately causes earnings and sustainable cash flow suffer." See SEC Form 10Q for the quarterly period ending March 31, 2009 for Hawaiian Electric Industries, Inc. and HECO, page 74.
[14] S&P's rating of BBB- or higher is considered "investment grade".

rating, but lowered its business risk profile assessment from "excellent" to "strong". On November 26, 2008, S&P assigned a stable outlook to the BBB rating.[15] However, on May 27, 2009, S&P changed Hawaiian Electric's outlook from stable to negative, which according to S&P –

> principally reflects prospects for poorer than expected HECO financial performance in 2009 and possibility 2010. These companies provide the parent with a substantial source of cash flows to service debt and pay its common dividend. As with HEI, HECO also has a business and financial profile of 'strong' and 'aggressive', respectively. HECO entered the recession with credit metrics that were marginally supportive of its 'BBB' ratings. In recent years, HECO has been unable to earn its authorized return on equity and its credit metrics have trended toward the weaker end of our range for 'BBB' utilities. While we see medium- to long-term improvement on the horizon for HECO due to expectations that improved cost recovery mechanisms will be approved by its regulator, the Hawaiian Public Utilities Commission (HPUC), we expect the next few years to be challenging for the utilities.[16]

S&P issued a bulletin in July 2009, which observed that "the interim ruling July 2 in Hawaiian Electric Co. Inc.'s (HECO; BBB/Negative/A-3) rate case and a recently announced delay in the company's rate case hearings is adverse for credit quality but is adequately captured in the negative outlook assigned to the ratings last month." HEI's form 10-Q report filed with the Securities Exchange Commission for the quarter ended September 30, 2009 at 91.

According to information provided by the Consumer Advocate's witness, Mr. Parcell, of the 60 electric utilities and combination gas and electric utilities covered by AUS Utilities Reports, there were 38 utilities with S&P credit ratings higher than Hawaiian Electric's BBB rating, 10 other utilities with the same BBB rating, and 11 utilities with ratings lower than BBB. See CA-T-4 at 23-24. If Hawaiian Electric's S&P rating were downgraded to BBB-, however, there would be 48 utilities with S&P ratings higher than Hawaiian Electric, 5 other utilities with

[15] See SEC Form 10Q for the quarterly period ending March 31, 2009 for Hawaiian Electric Industries, Inc. and HECO, page 73.

[16] See page 2 of HEI's May 27, 2009 Credit Profile, filed as part of Attachment 2 (pages 18-25) to the Company's response to CA-RIR-34.

ratings the same as Hawaiian Electric, and 6 utilities with ratings lower than Hawaiian Electric.

There has been considerable discussion of the Interim D&O (and the exclusion of CIP CT-1 costs) in financial publications regarding the financial strength of Hawaiian Electric and its parent company, Hawaiian Electric Industries ("HEI"). For example, D.A. Davison & Co. issued a July 10, 2009 Institutional Equity Research report on HEI "downgrading [HEI] from Neutral to UNDERPERFORM and lowering [HEI's] 12-18 month [earnings per share] target of $17 to $16". The report notes "the exclusion of any costs or rate base additions associated with CT-1" and explains that "[t]he lower target price reflects a less than accommodative interim rate decision and various signals that implementation of the rules surrounding the HCEI may be waylaid by the pressures of the weak Hawaiian economy."[17]

In a Global Credit Research report dated July 20, 2009,[18] Moody's similarly announced that it had "changed the rating outlook to negative from stable" for Hawaiian Electric and HEI, reflecting "a weakened service territory economy, which may be influencing the outcome of state regulatory decisions, at a time when the company's capital investment program is substantial." Id. at 1. One of the cited reasons for the downgrade was Moody's observation –

> that earlier this month, in HECO's 2009 rate case, the Hawaii PUC's interim decision of $61.1 million was about $18.7 million or 23% lower than the unanimously reached settlement agreement of $79.8 million entered into by the company, staff, and other interveners. While Moody's expects that the majority of the difference is likely to be granted by the Hawaii PUC, we understand that the rehearing date has been delayed. While Moody's understands the difficult position for regulators of increasing electric rates at a time when the economy is weak, maintaining a credit supportive regulatory framework is an important factor for investor-owned utility ratings. This is particularly relevant for HECO as it attempts to implement a dramatic change in its regulatory design over the next

[17] See pages 112-14 of Attachment 3 to the Company's response to CA-RIR-34.
[18] See pages 9-10 of Attachment 1 to the Hawaiian Electric Companies' response to CA-IR-2, filed July 23, 2009 in Docket No. 2009-0089.

several years which, if successful, will reduce the company's reliance on volatile fuel oil as a source of electric generation and reduce the variability in the financial results from a declines in kWh sales caused by the economy or conservation.

Id. (emphasis added).

DATED: Honolulu, Hawaii, November 19, 2009.

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HAWAIIAN ELECTRIC COMPANY, INC.

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CERTIFICATE OF SERVICE

I hereby certify that I have this date served a copy of the foregoing HAWAIIAN ELECTRIC COMPANY, INC.'S MOTION FOR SECOND INTERIM INCREASE FOR CIP CT-1 REVENUE REQUIREMENTS, OR IN THE ALTERNATIVE, TO CONTINUE ACCRUING AFUDC FOR THE CIP CT-1 PROJECT, EXHIBITS 1 AND 2, STATEMENT OF FACTS, DECLARATIONS OF ROBERT C. ISLER, CECILY A. BARNES AND ROSS H. SAKUDA and MEMORANDUM OF LAW, together with this CERTIFICATE OF SERVICE, as indicated below by hand delivery and/or by mailing a copy by United States mail, postage prepaid, to the following:

Hand Delivery	U.S. Mail	
X		Catherine Awakuni, Executive Director Department of Commerce and Consumer Affairs Division of Consumer Advocacy 335 Merchant Street, Room 326 Honolulu, Hawaii 96813
	X	James N. McCormick Theodore E. Vestal Associate Counsels (Code 09C) Naval Facilities Engineering Command, Pacific 258 Makalapa Drive, Suite 100 Pearl Harbor, HI 96860-3134
	X	Dr. Kay Davoodi NAVFAC HQ ACQ-URASO 1322 Patterson Ave., SE Ste. 1000 Washington Navy Yard Washington, DC 20374

DATED: Honolulu, Hawaii, November 19, 2009.

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